

Project No. 1251-100

Crude Oil Tank Farms Project, Agrood Area 30 (Module-1)



EGPC

System ID	030-LP-003
System Description	Field Fire detection PLC system

Sr.	Pre-Commissioning and Commissioning Dossier Index	Applicable (Yes/No)
1	Mechanical Completion Certificate (MCC)	
2	Ready for Startup Certificate (RFSU)	
3	System Punch Lists	
4	System Limits Marked Up P&ID	
5	System Index	
6	Piping Pre-Commissioning	
	6.01) Piping Test Packs	
	6.02) Piping Pre-commissioning Check Lists	
7	Piping Commissioning	
	7.01) Service Test, GLT, CLT and N2 Purging Certificates	
	7.02) Piping Commissioning Check Lists	
Sr.	Pre-Commissioning and Commissioning Dossier Index	Applicable (Yes/No)
8	Mechanical Pre-Commissioning	
	8.01) System Mechanical Index	
	8.02) Equipment Drawings	
	8.03) Equipment Datasheets	
	8.04) Boxing-up Certificates	

	8.05) Grouting Certificates	
	8.06) Pre-Alignment Certificates	
	8.07) Mechanical Pre-Commissioning Checklists	
<b>9</b>	<b>Mechanical Commissioning</b>	
	9.01) Final Alignment Certificates	
	9.02) Motor Solo Run Certificates	
	9.03) Mechanical Run Test (MRT) Certificates	
	9.04) Mechanical Commissioning Checklists	
	9.05) Mechanical Supplier Check Lists & Reports	
<b>10</b>	<b>Instrumentation Pre-Commissioning</b>	
	10.01) System Instrument Index	
	10.02) Instrument Data Sheets	
	10.03) Instrument Cable Schedule	
	10.04) System Instrumentation Wiring Diagram	
	10.05) Hook-up Drawing (Mechanical & Pneumatic)	
	10.06) Instruments Cables Schedule	
	10.07) Instruments Cables Laying Certificates	
	10.08) Instruments Cables Termination Certificates	
	10.09) Instruments Cables Testing Certificates	
	10.10) Instruments Calibration Certificates	
	10.11) Instrument Loop Checks Certificates	
	10.12) Instrumentation Pre-Commissioning Check Lists	
	10.13) Instrumentation Supplier Check Lists & Reports	
<b>11</b>	<b>Instrumentation Commissioning</b>	
	11.01) Instrumentation Function Test Certificates	
	11.02) Instrumentation Supplier Check Lists & Reports	
<b>Sr.</b>	<b>Pre-Commissioning and Commissioning Dossier Index</b>	<b>Applicable (Yes/No)</b>
<b>12</b>	<b>Electrical Pre-Commissioning</b>	
	12.01) System Electrical Index	
	12.02) Electrical Drawings	
	12.03) Motor Datasheets	
	12.04) Electrical Cables Schedule	
	12.05) Electrical Cables Laying Certificates	
	12.06) Electrical Cables Testing Certificates	
	12.07) Electrical Cables Termination Certificates	
	12.08) FAT Reports & Certificates	
	12.09) SAT Reports & Certificates	
	12.10) Electrical Pre-Commissioning Check Lists	
	12.11) Electrical Supplier Check Lists & Reports	



<b>13</b>	<b>Electrical Commissioning</b>	
	13.01) Electrical -Commissioning Check Lists	
	13.02) Electrical Supplier Check Lists & Reports	
<b>14</b>	<b>Red Marked-up Drawings</b>	
	14.01) P&ID	
	14.02) Instrumentation Drawings	
	14.03) Electrical Drawings	



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

### 1-Mechanical Completion Certificate (MCC)





## SYSTEM MECHANICAL COMPLETION CERTIFICATE (MCC)

**PROJECT TITLE** : CRUDE OIL TANK FARM PROJECT (AGROOD AREA)

**PROJECT No** : 01251-100


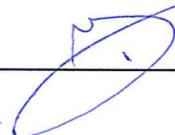

**SYSTEM NAME** : Field Fire Detection PLC System

**SYSTEM ID** : 030-LP-003

### THIS IS TO CERTIFY THAT:

- THE ABOVE SYSTEM HAS BEEN FABRICATED, ERECTED, INSTALLED AND TESTED TO THE REQUIREMENTS OF THE CONTRACT DRAWINGS, SPECIFICATIONS, THE APPLICABLE CODES AND STANDARDS.
- ALL PRE-COMMISSIONING RELEVANT ACTIVITIES, TESTS, INSPECTIONS AND CHECKS HAVE BEEN CARRIED OUT FOR THIS SYSTEM AND FOUND ACCEPTABLE.
- Q/C DOCUMENTATION OF THE ABOVE SYSTEM HAS BEEN AUDITED BY THE CUSTOMER SITE QUALITY CONTROL AND FOUND COMPLETED.
- ALL PUNCH LIST ITEMS CATEGORY (A) IN THIS SUBSYSTEM WERE CLEARED.
- THIS SYTEM IS MECHANICALLY COMPLETED ON THE DATE AND READY FOR COMMISSIONING (RFC) WITH THE FOLLOWING EXCEPTIONS.

### EXCEPTIONS :

COMPANY	PETROJET	ENPPI	PMC
NAME	Sobhy Selean	M-Abba11	Mohamed Ebrahim
TITLE	Qc ESS engineer		Elec. eng.
SIGNATURE			
DATE	4-7-2021		4-7-2021



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 2- Ready for Startup Certificate (RFSU)



## READY FOR START UP CERTIFICATE

**PROJECT TITLE** : EGPC CRUDE OIL TANK FARMS PROJECT (AGROOD-02)

**PROJECT No.** : 1251-100

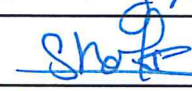
**SYSTEM /AREA /PLANT** : Field Fire detection PLC system

**SYSTEM /AREA /PLANT No.** : 030-LP-003

**THIS IS TO CERTIFY THAT:**

- THE MENTIONED SYSTEM /AREA /PLANT IS READY FOR START UP WHERE ALL MECHANICAL WORKS, PRECOMMISSIONING AND COMMISSIONING ACTIVITIES HAVE BEEN SUCCESSFULLY COMPLETED.
- MECHANICAL COMPLETION CERTIFICATE(S) FOR THE MENTIONED SYSTEM / AREA / PLANT HAVE BEEN SIGNED.
- ISSUANCE OF THIS READY FOR START UP CERTIFICATE(S) SHALL NOT RELIEVE CONTRACTOR(S) FROM THEIR OBLIGATIONS TO COMPLETE THE REMAINING SYSTEMS NOR FROM THEIR WARRANTY OBLIGATIONS AND OTHER PROVISIONS OF THE CONTRACT.
- THE FOLLOWING EXCEPTIONS AGREED TO BE CLEARED AFTER START UP AND WILL NOT PREVENT START UP ACTIVITIES.

**EXCEPTIONS :**

COMPANY	CONSORTIUM	PPC
NAME	Ahmed El Shafie	mohamed omar
TITLE	Commissioning Manager	S. engineer
SIGNATURE		M. Omar
DATE	8-7-2021	11-8-2021



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

### 3- System Punch Lists





## PUNCH LIST



PROJECT TITLE : CRUDE OIL TANK FARM PROJECT (AGROOD AREA)

PROJECT NUMBER : 01251-100

DISCIPLINE: Loss Prevention

SYSTEM NAME: Field Fire Detection PLC System

SYSTEM ID: 030-LP-003

SUB-SYSTEM NAME:

SUB-SYSTEM ID:

NO	DESCRIPTION	CAT	ACTION BY	DISP	CLEARANCE APPROVED BY	
1	030 - FD - 007 to be installed.	A	PTS	ELE	20	
2	030 - FD - 008 to be installed.	A	~	~		
3	030 - FD - 009 to be installed.	A	~	~		
4	030 - FD - 010 to be installed.	A	~	~		
5	030 - FD - 011 to be installed.	A	~	~		
6	030 - FD - 012 to be installed.	A	~	~		
7	030 - FD - 013 to be installed.	A	~	~		
8	030 - GD - 005 to be installed.	A	~	~		M.omer
9	030 - GD - 006 to be installed.	A	~	~		
10	030 - GD - 007 to be installed.	A	~	~		
11	030 - GD - 008 to be installed.	A	~	~		
12	030 - GD - 009 to be installed.	A	~	~		
13	030 - GD - 010 to be installed.	A	~	~		
14	030 - GD - 011 to be installed.	A	~	~		
15	030 - GD - 012 to be installed.	A	~	~		

CAT: CATEGORY(A,B,C), ACTION BY: (ENPPI, CONST. CONTRACTOR, SUPPLIER.....), DISP: DISCIPLINE(PIP, MECH, ELECT, INST.....)

COMPANY	PTJ	ENPPI	PMC
NAME	Sobhy Seleem	® Islam Sherif	
SIGN.	Sobhy		M.omer
DATE	30-5-2021		



## PUNCH LIST



PROJECT TITLE : CRUDE OIL TANK FARM PROJECT (AGROOD AREA)

PROJECT NUMBER : 01251-100

DISCIPLINE: Loss Prevention

SYSTEM NAME: Field Fire Detection PLC System

SYSTEM ID: 030-LP-003

SUB-SYSTEM NAME:

SUB-SYSTEM ID:

NO	DESCRIPTION	CAT	ACTION BY	DISP	CLEARANCE APPROVED BY
16	030 - HR - 001 to be installed.	A	DTS	ELE	
17	030 - MCP - 001 to be installed.	A	-	-	
18	030 - MCP - 008 to be installed.	A	-	-	
19	030 - PSH - 009 to be installed.	A	-	-	
20	030 - STB - 001 to be installed.	A	-	-	
21	030 - STR - 001 to be installed.	A	-	-	
22	030 - XS - 013 to be installed.	A	-	-	
23	030 - XS - 014 to be installed.	A	-	-	
24	Cable trays Cross to be Completed	C	-	-	
25	PSH step. up for Cable to be Utilized	C	-	-	
26	Final touch up and Foam Filling for all step-up trays	C	-	-	
27	<del>and</del> All unused opening. for derives and JB's to be Plugged with EX.	A	-	-	

CAT: CATEGORY(A,B,C), ACTION BY: (ENPPI, CONST. CONTRACTOR, SUPPLIER, ....), DISP: DISCIPLINE (PIP, MECH, ELECT, INST, .....)

COMPANY	PTJ	ENPPI	PMC
NAME	Sobhy Seleen		M. Omer
SIGN.			
DATE	30-5-2021		





Project: 01251-100  
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System ID	030-LP-003
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#### 4- System Limits Marked Up P&ID

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## 5- System Index



Project: 01251-100  
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## 6- Piping Pre-Commissioning



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
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## 6.01- Piping Test Packs





Project: 01251-100  
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## 6.02- Piping Pre-commissioning Check Lists



Project: 01251-100  
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System ID	030-LP-003
System Description	Field Fire detection PLC system

## 7- Piping Commissioning



Project: 01251-100  
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System ID	030-LP-003
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## 7.01- Service Test, GLT, CLT and N2 Purging Certificates



Project: 01251-100  
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## 7.02- Piping Commissioning Check Lists





Project: 01251-100  
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## 8- Mechanical pre-Commissioning



Project: 01251-100  
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System ID	030-LP-003
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## 8.01- System Mechanical Index



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 8.02- Equipment Drawings



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
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### 8.03- Equipment Datasheets





Project: 01251-100  
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## 8.04- Boxing-up Certificates



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System ID	030-LP-003
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## 8.05- Grouting Certificates



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
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## 8.06- Pre-Alignment Certificates



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## 8.07- Mechanical Pre-Commissioning Checklists





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## 9- Mechanical Commissioning



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
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## 9.01- Final Alignment Certificates



Project: 01251-100  
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## 9.02- Motor Solo Run Certificates



Project: 01251-100  
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### 9.03- Mechanical Run Test (MRT) Certificates



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## 9.04- Mechanical Commissioning Checklists





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## 9.05- Mechanical Supplier Check Lists & Reports



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## 10- Instrumentation Pre-Commissioning



Project: 01251-100  
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System ID	030-LP-003
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## 10.01- System Instrument Index



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System ID	030-LP-003
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## 10.02- Instrument Data Sheets



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System ID	030-LP-003
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### 10.03- Instrument Cable Schedule





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System ID	030-LP-003
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## 10.04- System Instrumentation Wiring Diagram



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CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



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## 10.05- Hook-up Drawing (Mechanical & Pneumatic)



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## 10.06- Instruments Cables Schedule



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
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## 10.07- Instruments Cables Laying Certificates



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
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## 10.08- Instruments Cables Termination Certificates



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
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## 10.09- Instruments Cables Testing Certificates



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
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## 10.10- Instruments Calibration Certificates





Project: 01251-100  
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System ID	030-LP-003
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## 10.11- Instrument Loop Checks Certificates



Project: 01251-100  
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## 10.12- Instrumentation Pre-Commissioning Check Lists



Project: 01251-100  
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### 10.13- Instrumentation Supplier Check Lists & Reports



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
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## 11- Instrumentation Commissioning



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 11.01) Instrumentation Function Test Certificates

<b>MINUTES OF MEETING</b>	<b>PROJECT TITLE :</b> EGPC Crude Oil Tank Farms Project (AGROOD 30)	
	<b>PROJECT No :</b> 1251-100	<b>DATE :</b> 1-9-2021
	<b>CUSTOMER :</b> EGPC (PPC)	

<b>LOCATION :</b> Agrood, Suez, EGYPT	<b>MEETING DATE :</b> 1-9-2021
<b>WRITTEN BY :</b> Mohamed Gamal	<b>DEPARTMENT :</b> Commissioning & Startup
<b>MEETING No :</b> [MEETING No]	<b>FILE No :</b>

**PURPOSE OF MEETING:**

Fire Alarm Control Panel (FACP) at Agrood Area 30 Commissioning and Start-up.

**ATTENDEES:**

<b>ENPPI</b>	<b>PETROJET</b>	<b>PPC</b>
Mohamed Gamal	Sobhy Seleen	Mohamed omar
for [Signature]	<u>Sob</u>	M. omar

**DISTRIBUTION:**

MINUTES OF MEETING (Cont'd)			
PROJECT No: 1251-100		MEETING No: [MEETING No]	MEETING DATE: 1-9-2021
ITEM No	DESCRIPTION OF DISCUSSION	ACTION BY	DATE
	<ul style="list-style-type: none"> <li>This close-out meeting was held between ENPPI, PETROJET and PPC to certify the completion of commissioning and startup works for FACP at Agrood area 30.</li> <li>Commissioning of FACP includes but not limited to the following:               <ol style="list-style-type: none"> <li>Power-up for FACP panel</li> <li>Troubleshooting for all FACP devices.</li> <li>Cause &amp; Effect verification for FACP for substation building <u>except the battery room.</u></li> </ol> </li> <li>Signing off this MOM does not relieve any contractor from their contractual obligations.</li> </ul>		



<b>MINUTES OF MEETING</b>	<b>PROJECT TITLE :</b> EGPC Crude Oil Tank Farms Project (AGROOD 30) (Module 01)							
	<b>PROJECT No :</b> 1251-100	<b>DATE :</b> 5-9-2021						
	<b>CUSTOMER :</b> EGPC (PPC)							
<b>LOCATION :</b> Agrood, Suez, EGYPT		<b>MEETING DATE :</b> 5-9-2021						
<b>WRITTEN BY :</b> Ahmed El Shafie		<b>DEPARTMENT :</b> Commissioning & Startup						
<b>MEETING No :</b> [MEETING No]		<b>FILE No :</b>						
<b><u>PURPOSE OF MEETING:</u></b>  <p style="text-align: center;">Fire &amp; Gas Cause &amp; Effect Verification Finalization for Agrood Area 30 (Module-01)</p>								
<b><u>ATTENDEES:</u></b> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; width: 33%;"><b><u>ENPPI</u></b></td> <td style="text-align: center; width: 33%;"><b><u>PETROJET</u></b></td> <td style="text-align: center; width: 33%;"><b><u>PPC</u></b></td> </tr> <tr> <td style="text-align: center;"><i>Ali Ashraf</i></td> <td style="text-align: center;"><i>Sobhyeleen</i></td> <td style="text-align: center;"><i>M. Omar</i></td> </tr> </table>			<b><u>ENPPI</u></b>	<b><u>PETROJET</u></b>	<b><u>PPC</u></b>	<i>Ali Ashraf</i>	<i>Sobhyeleen</i>	<i>M. Omar</i>
<b><u>ENPPI</u></b>	<b><u>PETROJET</u></b>	<b><u>PPC</u></b>						
<i>Ali Ashraf</i>	<i>Sobhyeleen</i>	<i>M. Omar</i>						
<b><u>DISTRIBUTION:</u></b>  								

## MINUTES OF MEETING (Cont'd)

PROJECT No : 1251-100

MEETING No : [MEETING No]

MEETING DATE : 5-9-2021

ITEM No	DESCRIPTION OF DISCUSSION	ACTION BY	DATE
	<ul style="list-style-type: none"> <li>This close-out meeting was held between ENPPI, PETROJET and PPC to certify the completion of Fire and gas cause-and-effect verification for Agrood area 30 entirely.</li> <li>Fire and gas cause-and-effect verification have been tested, witnessed, and approved by PPC.</li> <li>Signing off this MOM does not relieve any contractor from their contractual obligations.</li> </ul> <p><b>Exceptions:</b></p> <p>* GD-013 shall be fixed (cleared) Sobhy</p> <p>* 2 smoke detectors in battery rooms.</p> <p>* 4 Gas detectors ZAM modules.</p>		
	<p>Enppi      petrojet      PPC</p> <p>Ali Ashraf      Sobhydeen      M. Omar</p>		





Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
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## 11.02- Instrumentation Supplier Check Lists & Reports



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System ID	030-LP-003
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## 12- Electrical Pre-Commissioning



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 12.01- System Electrical Index











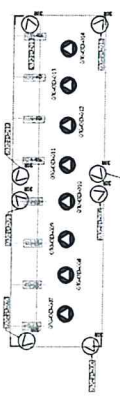
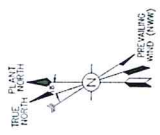


Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)

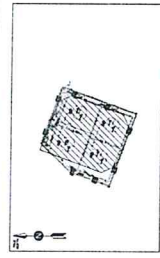
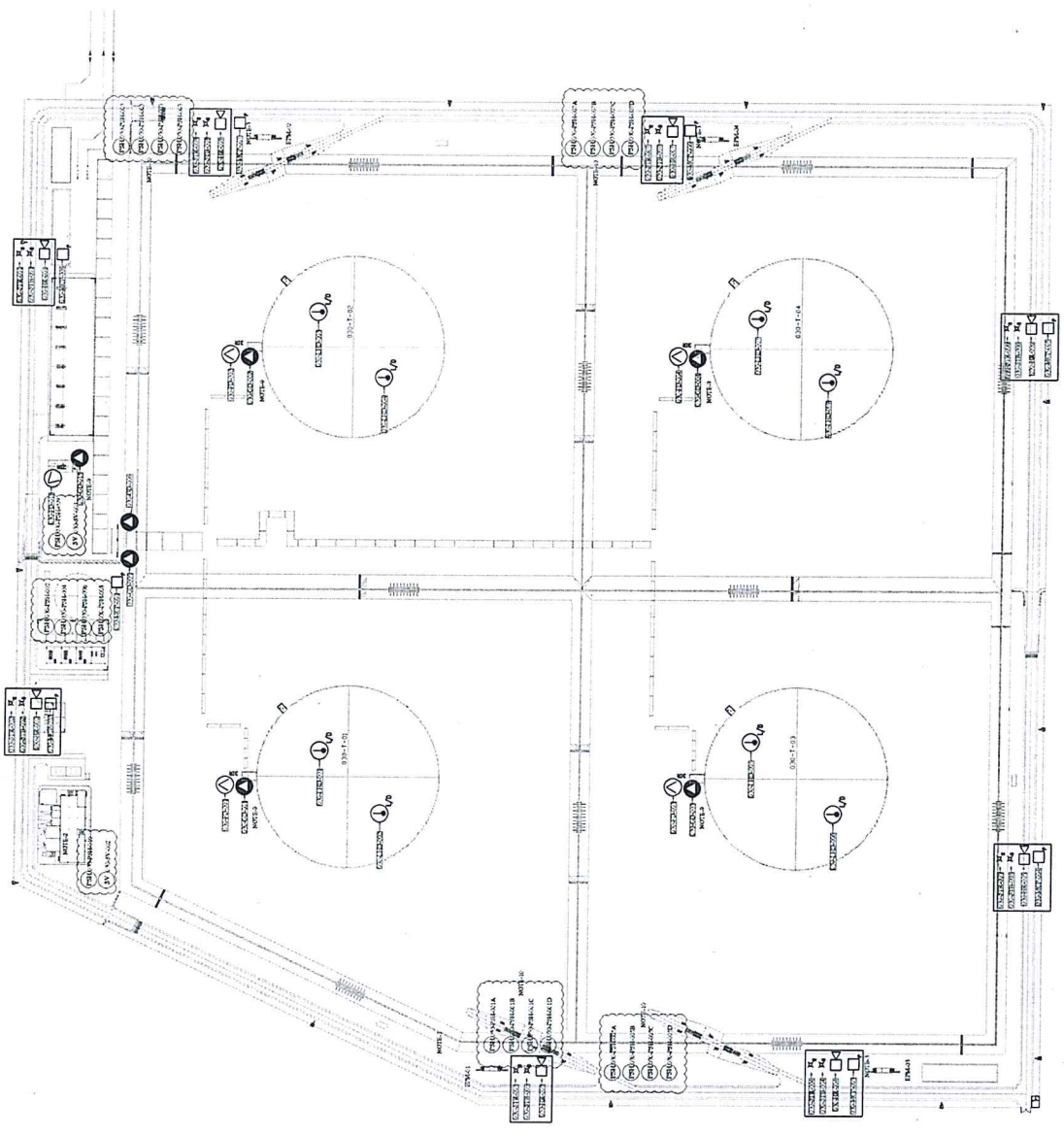


System ID	030-LP-003
System Description	Field Fire detection PLC system

## 12.02- Electrical Drawings



DETAIL A



DET PLAN

NO.	DESCRIPTION	QTY	UNIT	REMARKS
1	FLAME DETECTOR (TUBE INFRARED)	4	PCS	
2	STROBE LIGHT (RED-FRE)	4	PCS	
3	STROBE LIGHT (BLUE-GAS)	4	PCS	
4	PRESSURE SWITCH HIGH	4	PCS	
5	SOLENOID VALVE ON DEBRIDE VALVE	4	PCS	

NO.	DESCRIPTION	QTY	UNIT	REMARKS
6	MANUAL STATION (PULL STATION)	4	PCS	
7	ALARM HORN (MARTIN-TOH)	4	PCS	
8	WATER PUMP	1	PCS	
9	WATER TANK	1	PCS	
10	WATER PUMP MOTOR	1	PCS	

NO.	DESCRIPTION	QTY	UNIT	REMARKS
11	WATER PUMP MOTOR	1	PCS	
12	WATER TANK	1	PCS	
13	WATER PUMP	1	PCS	
14	WATER TANK	1	PCS	
15	WATER PUMP	1	PCS	

EGPC  
EGPC CRUDE OIL TANK FARM  
FIRE AND GAS DETECTION LAYOUT

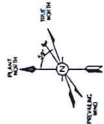
EGPC  
EGPC CRUDE OIL TANK FARM  
FIRE AND GAS DETECTION LAYOUT

Enppi  
EGPC CRUDE OIL TANK FARM  
FIRE AND GAS DETECTION LAYOUT

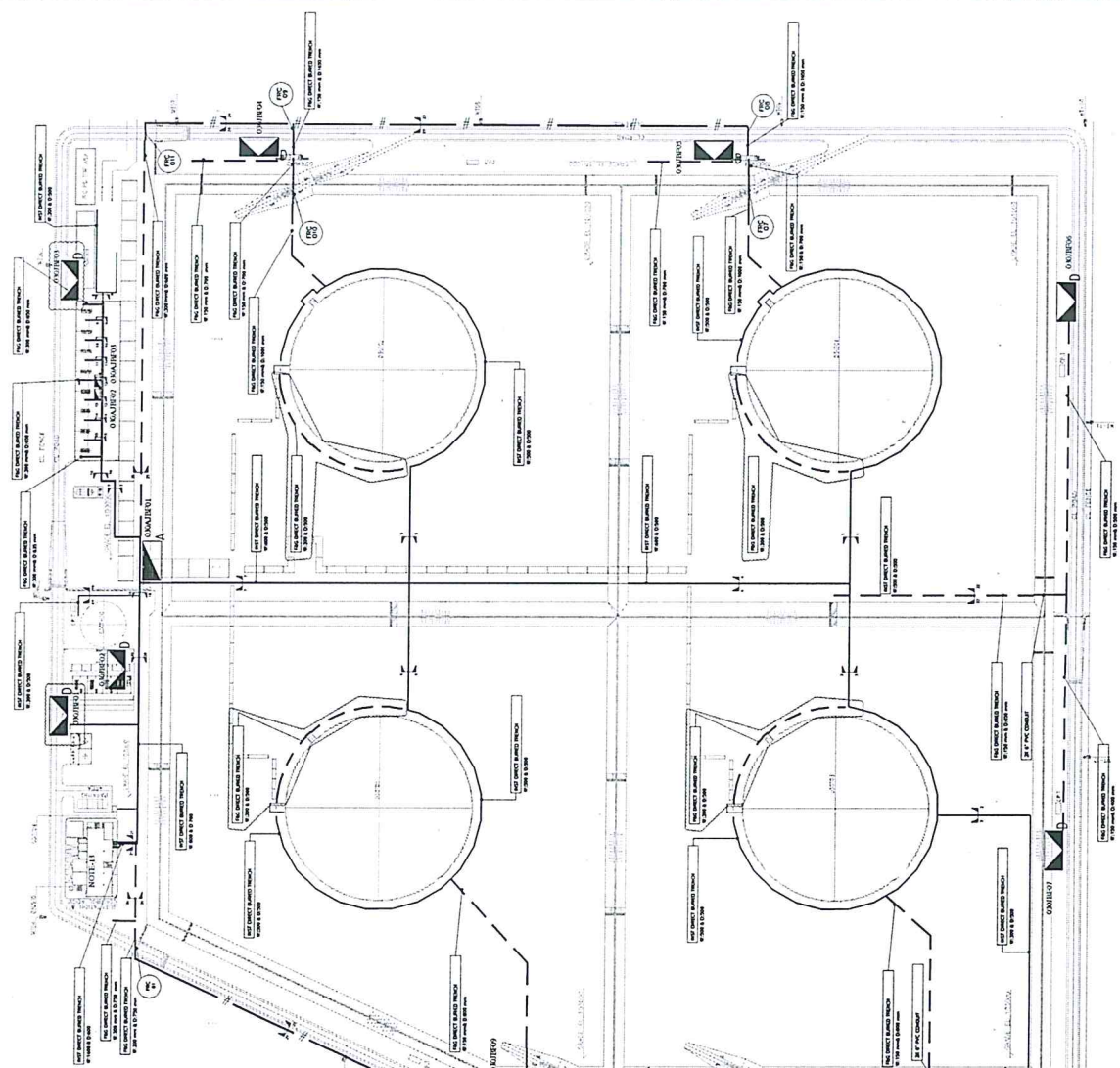
DOCUMENT NUMBER	DESCRIPTION
01251-100-030-001	GENERAL DET PLAN

SYMBOL	DESCRIPTION
⊖	ELECTRICAL LINEAR HEAT DETECTOR
⊕	FLAME DETECTOR (TUBE INFRARED)
⊙	COMPRESSIBLE GAS DETECTOR
⊞	MANUAL STATION (PULL STATION)
⊟	ALARM HORN (MARTIN-TOH)
⊠	STROBE LIGHT (RED-FRE)
⊡	STROBE LIGHT (BLUE-GAS)
⊢	PRESSURE SWITCH HIGH
⊣	SOLENOID VALVE ON DEBRIDE VALVE

SYMBOL	DESCRIPTION
⊖	ELECTRICAL LINEAR HEAT DETECTOR
⊕	FLAME DETECTOR (TUBE INFRARED)
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⊡	STROBE LIGHT (BLUE-GAS)
⊢	PRESSURE SWITCH HIGH
⊣	SOLENOID VALVE ON DEBRIDE VALVE



Area No.	REC No.	No. of layers	No. sleeves per layer	Length (m)	Width	Height	BOC Level
030	FRC 01	1	2	8	500	300	850
	FRC 02	1	2	8	500	300	850
	FRC 03	1	2	23	500	300	850
	FRC 04	1	2	8	500	300	850
	FRC 05	1	2	8	500	300	850
	FRC 06	1	2	10	500	300	850
	FRC 07	1	2	23	500	300	850
	FRC 08	1	2	8	500	300	850
	FRC 09	1	2	8	500	300	850
	FRC 10	1	2	23	500	300	850
	FRC 11	1	2	8	500	300	850



**LEGEND**

- PVC CONDUIT
- DIRECT BURIED CABLE TRENCH
- CONCRETE SET CABLE TRENCH
- ANALOGUE JUNCTION BOX
- SHEET PILED FIRE AND GAS TRENCH
- ROAD CROSSING TRENCH
- JUNCTION JUNCTION BOX
- TELECOM DIRECT BURIED CABLE TRENCH

**KEY PLAN**

Scale: 1:1000

North Arrow

**REFERENCES**

DOCUMENT NUMBER	DESCRIPTION
0121-100-030-001	EGPC CRUDE OIL TANK FARM
0121-100-030-002	EGPC CRUDE OIL TANK FARM
0121-100-030-003	EGPC CRUDE OIL TANK FARM
0121-100-030-004	EGPC CRUDE OIL TANK FARM
0121-100-030-005	EGPC CRUDE OIL TANK FARM
0121-100-030-006	EGPC CRUDE OIL TANK FARM
0121-100-030-007	EGPC CRUDE OIL TANK FARM
0121-100-030-008	EGPC CRUDE OIL TANK FARM
0121-100-030-009	EGPC CRUDE OIL TANK FARM
0121-100-030-010	EGPC CRUDE OIL TANK FARM

**NOTES**

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
- ALL ELECTRICAL INSTALLATION WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE IEC CODE.
- ALL NON-ELECTRIC CABLES SHALL BE GROUPED EFFECTIVELY IN ACCORDANCE WITH NEC 250.
- WALL PENETRATION SEALANT SHALL BE PRE-APPLIED.
- THE DESIGN & CONSTRUCTION OF THE FIRE ALARM SYSTEM SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS.
- THE CABLE ROUTING SHOWN IS RECOMMENDED.
- ONLY CONSTRUCTION CONTRACTOR SHALL BE RESPONSIBLE FOR ACTUAL CABLE ROUTING BETWEEN DEVICES AND TAP DURING CONSTRUCTION.
- CABLE ROUTE FROM CABLE TRAY/TRENCH TO DEVICE SHALL BE FIELD ROUTED BY CONSTRUCTION CONTRACTOR.
- CABLE ROUTE MARKER POSTS SHALL BE INSTALLED TO IDENTIFY UNDERGROUND ROUTES.
- CABLE SEGREGATION & SEPARATION SHALL BE IN ACCORDANCE WITH NEC 250.
- CONNECTION FROM CABLE TRENCH TO ANY FIELD DEVICE SHALL BE THROUGH PVC COATED CONDUIT.
- INTERFERENCE CABLES BETWEEN FIRE FIGHTING PUMPS AND GAS SYSTEM SHALL BE ROUTED IN CABLE CONDUIT SUPPORTED ON FIRST HORIZONTAL BEAM IN SPACE.

**EGPC**

EGPC CRUDE OIL TANK FARM  
FIRE AND GAS CABLE ROUTING LAYOUT  
AGROOD AREA (MODULE-1)

**EGPC**

EGPC CRUDE OIL TANK FARM  
FIRE AND GAS CABLE ROUTING LAYOUT  
AGROOD AREA (MODULE-1)

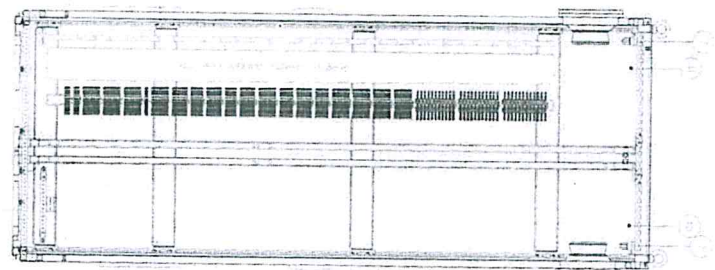
Scale: 1:1000

North Arrow

01/03 2





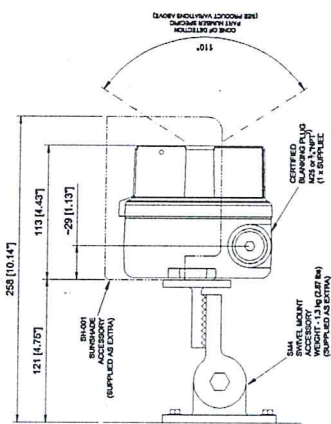


HEAD FRONT  
HEAD RIGHT VIEW

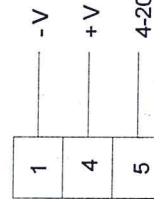
CONTRACTOR:		PROJECT:		CUT: 1/2" x 1/2"	
 <b>ADD</b> ADD Electrical Industries (Arab) - S.A.E		<b>EGPC CRUDE OIL TANK</b>		 <b>EGPC</b>	
<b>Egyptian General Petroleum Company (EGPC)</b>		<b>Customer: Epppi</b> <small>(Selling Gas and Petroleum and Process Products)</small>		<b>Document Title:</b> EGPC PANELS OUTLINE DRAWINGS	
<b>Intit</b> GENERAL ARRANGEMENT		<b>Rev. 01</b> 23/09/2020		<b>Project:</b> IDEN19613007	
<b>Document No.</b> 1251-100-533-B01-6		<b>Issued for Review:</b> HEMAM		<b>Feefat:</b> HEMAM	
<b>Sheet:</b> 015		<b>Issued:</b> HEMAM		<b>Approved:</b> HEMAM	

## PRODUCT VARIATIONS

## 4X - 211241 - -



## 2- Flame Detector (FS24x)



SW3 SET TO "1" FOR CURRENT SOURCE (SEE NOTE 4 ) TYPICAL  
WIRING FOR R 4-20mA (CURRENT SOURCE) ANALOG OUTPUT

REV	DATE	DESCRIPTION	ISSUED FOR APPROVAL	DATE	BY	PREPARED	CHECKED	APPROVED	S.P.A.
RD	10/20/2010								

ABB TURBOCHARGERS S.A.E.

النفط والغاز  
ENPPI  
ENGINEERING FOR THE PETROLEUM AND PROCESS INDUSTRIES  
ENPPI PROJECT NUMBER 4176-503



SCALE	Project Name: EGPC CRUDE OIL TANK FARM
NONE	

## INSTRUMENT TERMINATION AND HOOK UP DETAILS

DRAWING NUMBER	SHEET NUMBER	REVISION
SBS-JOB503-DC18-118-011	01/10	R0

[illegible]

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**Enppi**  
ENGINEERING FOR THE PETROLEUM AND PROCESS INDUSTRIES  
ENPPI PROJECT NUMBER 4176-503



SBS

5353 West Alabama St Suite 200 E.Houston ,Texas,USA  
Zip Code 77056  
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Email: sales@sbaprotech.com

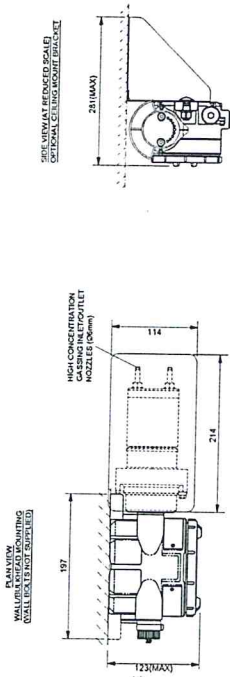
Project Name: EGPC CRUDE OIL TANK FARM

DRAWING TITLE

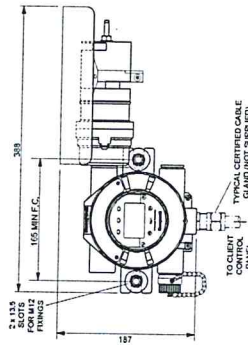
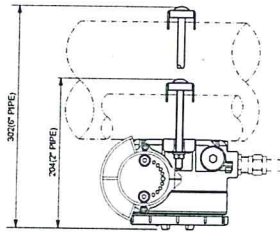
## INSTRUMENT TERMINATION AND HOOK UP DETAILS

SCALE	DRAWING NUMBER	SHEET NUMBER	REVISION
NONE	SBS-JOB503-DC18-118-011	01/10	R0

# COMBUSTIBLE GAS DETECTOR



SEE VIEW (OPTIONAL) Z-A  
E-TYPE MOUNTING



## ELECTRICAL WIRING

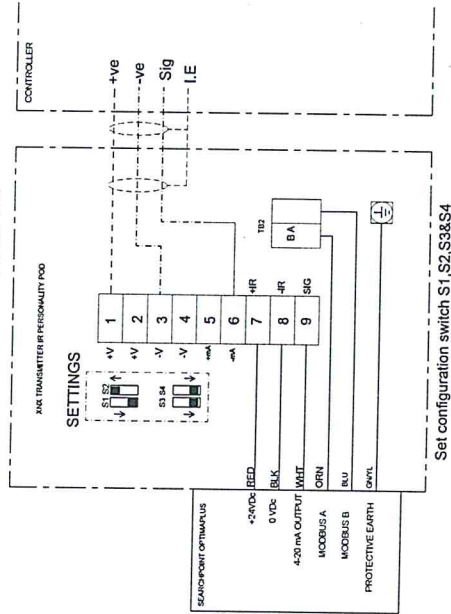


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Email: sales@sbsproject.com

Project Name: EGPC CRUDE OIL TANK FARM

DRAWING TITLE  
INSTRUMENT TERMINATION AND  
HOOK UP DETAILS

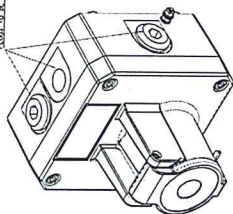
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NONE	SBS-JOB503-DC18-118-011	01/10	RO



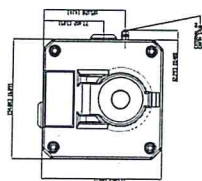
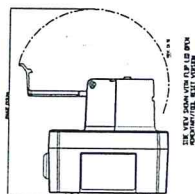
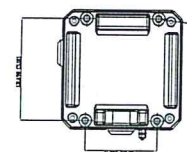
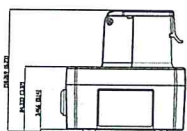


# GNExCP7-PT GRP PUSH BUTTON (TOOL RESET) GENERAL SIGNALING PUSH BUTTON CALL POINT

3 SET POSITION IS APPROVED  
CABLE CLAMP TO TERMINAL  
PLUG IN TO USE IN LOCK ENTRY

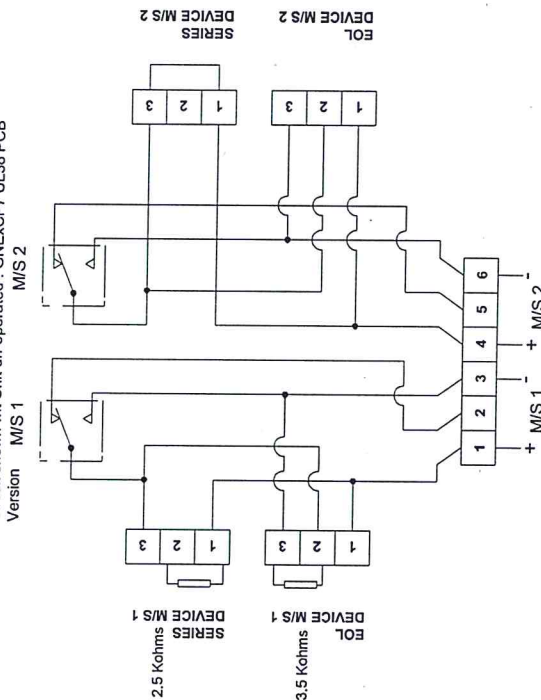


ISO VIEW / FROM UNIT IS CLOSED  
(04X20717 / 04X20719)



## ELECTRICAL WIRING

Optional Single or Double Microswitch  
Circuit shown wit Unit un-operated : GNExCP7 UL38 PCB  
Version M/S 1



REV	DATE	ISSUED FOR APPROVAL	DESCRIPTION	REVISION	DATE
1	2018				
2	2018				
3	2018				
4	2018				
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99	2018				
100	2018				

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Email: sales@sbsproven.com

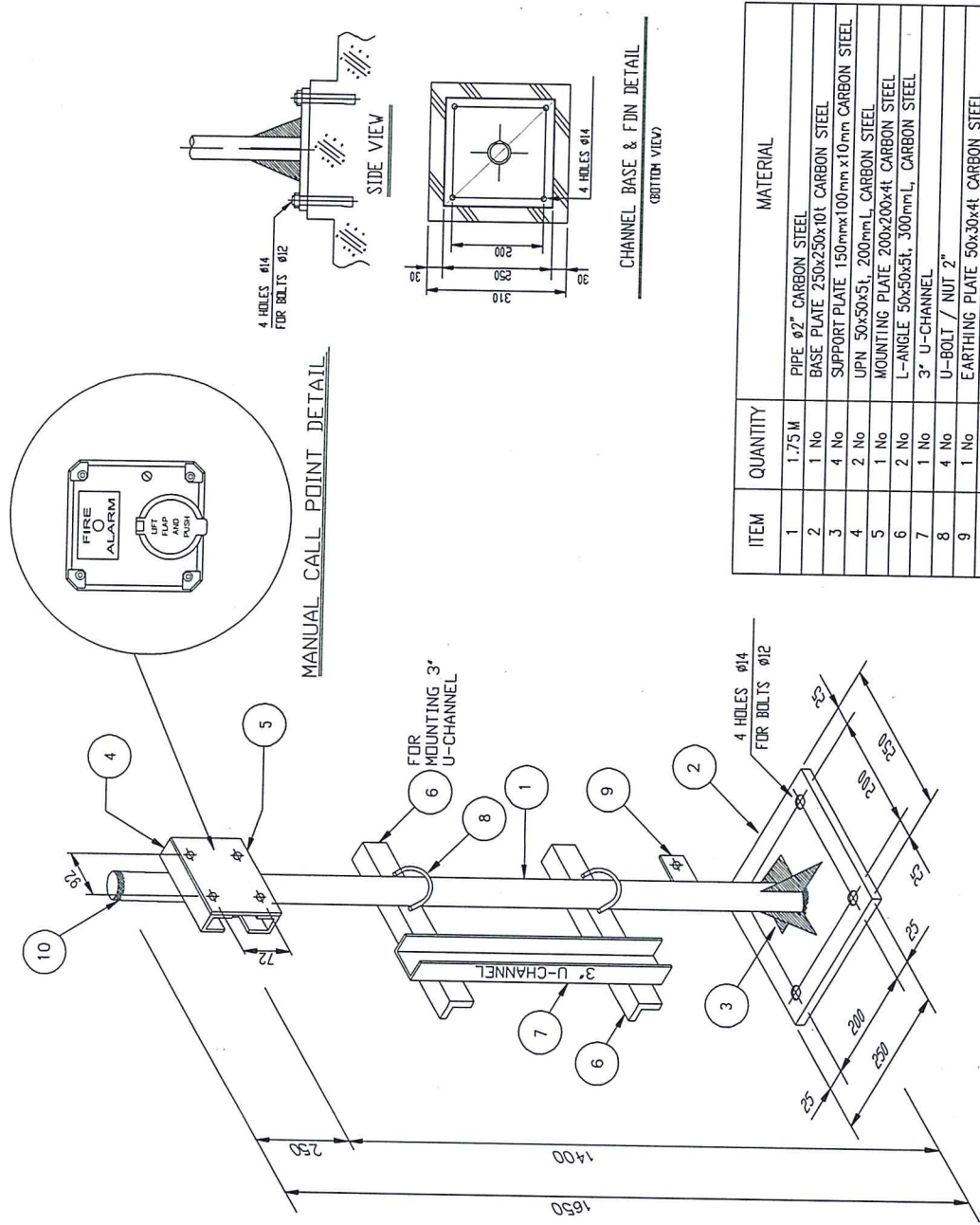
Project Name: EGPC CRUDE OIL TANK FARM

DRAWING TITLE  
INSTRUMENT TERMINATION AND  
HOOK UP DETAILS

SCALE	DRAWING NUMBER	SHEET NUMBER	REVISION
NONE	SBS-JOB503-DC18-118-011	01/10	R0

DOCUMENT NUMBER	DESCRIPTION

NOTES



ITEM	QUANTITY	MATERIAL
1	1.75 M	PIPE 62" CARBON STEEL
2	1 No	BASE PLATE 250x250x10t CARBON STEEL
3	4 No	SUPPORT PLATE 150mmx100mm x10mm CARBON STEEL
4	2 No	UPN 50x50x5t, 200mmL CARBON STEEL
5	1 No	MOUNTING PLATE 200x200x4t CARBON STEEL
6	2 No	L-ANGLE 50x50x5t, 300mmL, CARBON STEEL
7	1 No	3" U-CHANNEL
8	4 No	U-BOLT / NUT 2"
9	1 No	EARTHING PLATE 50x30x4t CARBON STEEL
10	1 No	CAP 62" CARBON STEEL

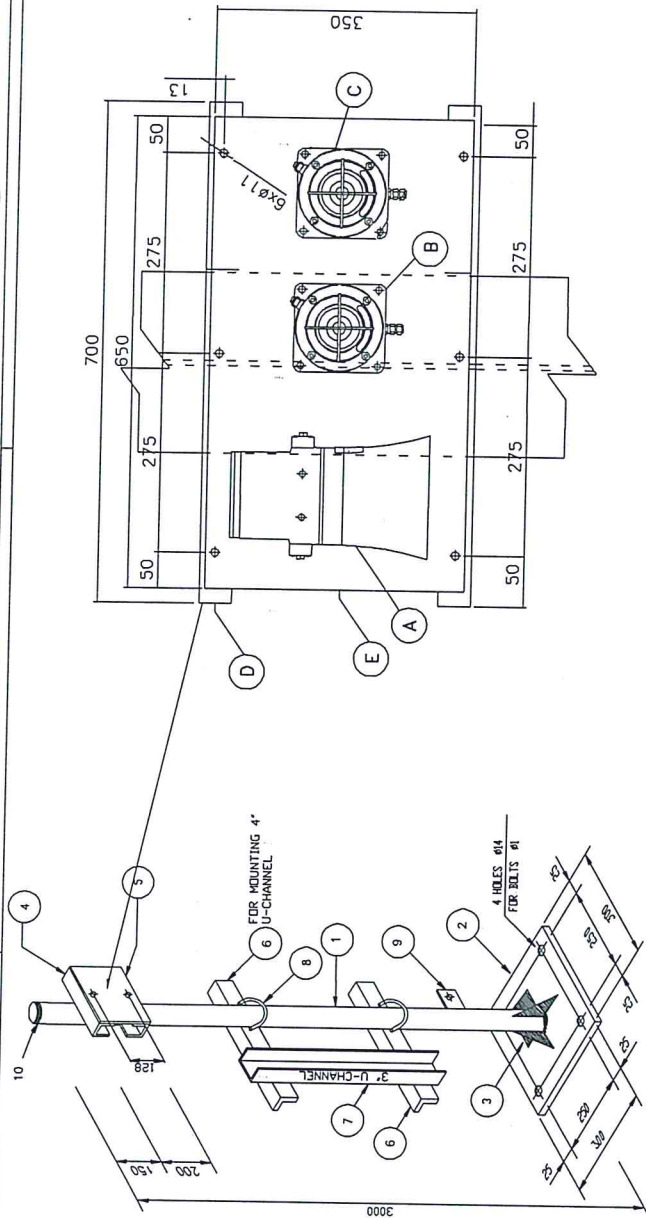
P.O. No. : 1251-100-196-10-33	MANUFACTURER: e2S	MANUAL ALARM CALL POINT (FIELD)
P.O ITEM No.: 2.1	MODEL No. : GNEXCP7PTSABPL6F1R	
SUPPLIER : ABB		
		QUANTITY: TYPICAL AS PER (FIELD) FIRE & GAS DETECTION LAYOUT

NOTICE  
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EGPC  
EGPC CRUDE OIL TANK FARM  
RAS SHUKAIR AREA  
FIRE AND GAS DEVICES  
TYPICAL INSTALLATION DETAILS  
المنطقة المحيطة بالتanks الخام والغازات  
Enppi  
ENGINEERING FOR THE PETROLEUM AND PROCESS INDUSTRIES  
EGPC  
FOR : EGPC  
AT : RAS SHUKAIR  
إلى: المنطقة المحيطة بالتanks الخام  
موقع: راس شوكير  
EGPC CRUDE OIL TANK FARM  
RAS SHUKAIR AREA  
FIRE AND GAS DEVICES  
TYPICAL INSTALLATION DETAILS  
المنطقة المحيطة بالتanks الخام والغازات  
Enppi  
ENGINEERING FOR THE PETROLEUM AND PROCESS INDUSTRIES  
EGPC  
FOR : EGPC  
AT : RAS SHUKAIR  
إلى: المنطقة المحيطة بالتanks الخام  
موقع: راس شوكير

SCALE : 1:1  
REVISION DATE : 14-MAY-2020  
REVISION NUMBER : 01251-100-030-ATD-001  
SHEET OF SHEETS : 3/20  
0





ITEM	QUANTITY	MATERIAL
1	1 No	PIPE 4", HOT DIP GALVANIZED CARBON STEEL
2	1 No	BASE PLATE 300X300X10, HOT DIP GALVANIZED CARBON STEEL
3	4 No	SUPPORT PLATE 200mmX150mmX10mm, HOT DIP GALVANIZED CARBON STEEL
4	2 No	UPN 50X50X5, 700mmL, HOT DIP GALVANIZED CARBON STEEL
5	1 No	MOUNTING PLATE 650X350X4, HOT DIP GALVANIZED CARBON STEEL
6	2 No	L-ANGLE 50X50X5, 300mm L, HOT DIP GALVANIZED CARBON STEEL
7	1 No	3" U-CHANNEL
8	4 No	U-BOLT NUT 4"
9	1 No	EARTHING PLATE 50X30X4, HOT DIP GALVANIZED CARBON STEEL
10	1 No	CAP 4", HOT DIP GALVANIZED CARBON STEEL
ITEM	QUANTITY	MATERIAL
A	1 No	FIRE ALARM HORN
B	1 No	FIRE ALARM BEACON (RED)
C	1 No	GAS ALARM BEACON (BLUE)
D	2 No	UPN 50X50X5, 700mmL, HOT DIP GALVANIZED CARBON STEEL
E	1 No	MOUNTING PLATE 650X350X4, HOT DIP GALVANIZED CARBON STEEL

P.O. No. :1251-100-196-10-33

MANUFACTURER: e2S

P.O. ITEM No.: 2.2 , 2.3 & 2.4

MODEL No. : E2XS1FDC024BN3A1B  
E2XBL2DC024BN3A1B/R  
E2XBL2DC024BN3A1B/B

SUPPLIER : ABB

## HORN AND BEACONS ASSEMBLY (FIELD)

QUANTITY: TYPICAL AS PER (FIELD) FIRE & GAS DETECTION LAYOUT

DOCUMENT NUMBER	DESCRIPTION

### NOTES

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATED.
2. DETAIL SHOWN FOR INSTALLATION ON A CONCRETE FOUNDATION, HOWEVER THE SAME DETAIL CAN BE USED FOR INSTALLATION ON STRUCTURES.

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FOR : EGPC

AT : RAS SHUKAIR

إجمالي: البنية التحتية للنفط

الموقع: راس شكير

EGPC CRUDE OIL TANK FARM

RAS SHUKAIR AREA

FIRE AND GAS DEVICES

TYPICAL INSTALLATION DETAILS

التركيب النموذجي للأجهزة النارية والغازية

EGPC

ENGINEERING FOR THE PETROLEUM AND PROCESS INDUSTRIES

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1-32-010 / Non-sparking signals

# E2xS1F Alarm Sounder/Horn



The hazardous area E2xS1F alarm horn sounder is UL/cULs approved for Class I Div 2 and Class II Div 2 as well as IECEx and ATEX certified for Zone 2 and 22 applications.

With a nominal sound level output of 116dB(A) at 1 metre and a choice of 45 alarm tones and 3 remotely selectable stages the E2xS1F alarm sounder horn is suitable for all general signalling duties.

The E2x range features enclosures manufactured from lightweight, corrosion proof PPS and high impact, fire retardant ABS re-entrant flare horns; both of which are suitable for the harshest of environments.

## Features

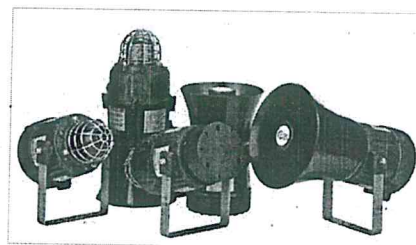
- Automatic synchronisation on multi-sounder system.
- Continuously rated.
- Large termination area.
- Stainless steel fixings.
- Ratchet adjustable stainless steel 'U' bracket for 360° positioning.
- Duplicate cable terminations (in & out for daisy-chain installations).
- Tropicalisation available on request.
- Available with custom tone configurations and frequencies.

## Approvals

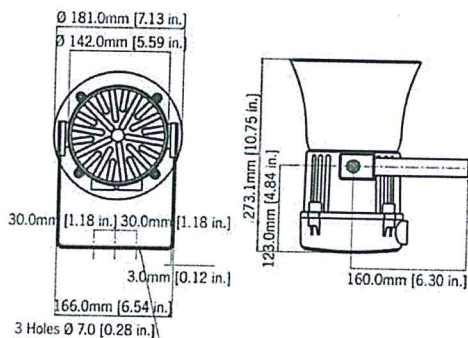
- ATEX certificate: DEMKO 06 ATEX 0421554X
- IECEx certificate: IECEx ULD 14.0012X
- UL/cUL File ref: E230764

## Coding

- IECEx / ATEX:
  - II 3G Ex nA IIC T4 Gc Ta -20°C to +55°C
  - II 3D Ex tc IIIC T85°C Dc Ta -20°C to +55°C
- NEC Class / Zone ratings US:
  - Class I Zone 2 AEx nA IIC T4 Gc Ta -20°C to +55°C
  - Zone 22 AEx tc IIIC T85°C Dc Ta -20°C to +55°C
- CEC Class / Zone ratings Canada
  - Ex nA IIC T2 Gc Ta -20°C to +55°C
  - Ex tc IIIC 85°C Dc Ta -20°C to +55°C
- NEC & CEC Class / Division Ratings for US / Canada
  - Class I, Div 2, ABCD T3C Ta -20°C to +55°C
  - Class I, Div 2, ABCD T4 Ta -20°C to +40°C
  - Class II, Div 2, FG T6 Ta -20°C to +55°C
  - Class II, Div 2, FG T6 Ta -20°C to +55°C







## Specification

Maximum output:	116dB(A) @ 1 metre [107dB(A) @ 10ft/3m]
Nominal output:	113dB(A) @ 1m +/- 3dB - Tone 2 [104dB(A) @ 10ft/3m]
No. of tones:	45 (UK00A/PFEER compliant)
No. of stages:	3
Volume control:	Max. 113dB(A); Min. 105dB(A) - Tone 2
Effective range:	100m/328ft @ 1KHz
Voltages DC:	24Vdc (10-30Vdc); 48Vdc
Voltages AC:	115Vac; 230Vac
Ingress protection:	IP rating per EN60079-0:IP64 IP rating per EN60529:IP66 Type rating per UL50E/NEMA250:4/4X/13
Enclosure material:	UL94V0 PPS & ABS
Lens material:	Borosilicate glass dome with PC prismatic lens cover.
Guard:	Stainless Steel dome guard as standard
Cable entries:	Dual M20x1.5 or 1/2"NPT
Terminals:	0.5 - 2.5mm <sup>2</sup> (20-14 AWG)
Line monitoring:	Blocking diode included EOL can be factory fitted
Operating temp:	-20 to +55°C [-4° to +131°F]
Storage temp:	-40 to +70°C [-40° to +158°F]
Relative humidity:	90% at 20°C [68°F]
Weight:	DC: 2.5kg/5.5lbs AC: 3.00kg/6.6lbs
*SPL data +/-3dB(A). Measured at optimum voltage.	

## Part Codes

Part Code:	Ident.:	Description:
Product type:	E2xS1	E2xS1 alarm horn sounder
Flare type:	F	Flare Horn
Voltage:	AC115 AC230 DC024 DC048	115V ac 50/60Hz 230V ac 50/60Hz 24V dc (10-30V dc) 48V dc
Cable entries:	A B C	M20x1.5 & ½" NPT M20x1.5 & M20x1.5 ½" NPT & ½" NPT
Stopping plug material:	N	Nylon
Bracket & tag: [s]	1 2 3 4	304 A2 Stainless Steel 316 A4 Stainless Steel 304 A2 Stainless Steel & Equip. Tag 316 A4 Stainless Steel & Equip. Tag
Approvals:	A1	UL, cULs, IECEx & ATEX
Enclosure:	B	Black

## Current Consumption

Version:	Voltage:	Current:
24V dc	10-30Vdc	284mA
48V dc	38-50Vdc	146mA
115V ac	50/60Hz +/-10%	104mA
230V ac	50/60Hz +/-10%	54mA



# **Tone table**

<b>S 1</b>	<b>Description</b>	<b>S 2</b>	<b>S 3</b>
T 2	800/1000Hz @ 0.25 sec Alternating	T 17	T 5
T 3	500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop	T 2	T 5
T 4	800/1000Hz @ 1Hz Sweeping	T 6	T 5
T 5	2400Hz Continuous	T 3	T 20
T 6	2400/2900Hz @ 7Hz Sweeping	T 7	T 5
T 7	2400/2900Hz @ 1Hz Sweeping	T 10	T 5
T 8	500/1200/500Hz @ 0.3Hz Sweeping	T 2	T 5
T 9	1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.	T 15	T 2
T 10	2400/2900Hz @ 2Hz Alternating	T 7	T 5
T 11	1000Hz @ 1Hz Intermittent	T 2	T 5
T 12	800/1000Hz @ 0.875Hz Alternating	T 4	T 5
T 13	2400Hz @ 1Hz Intermittent	T 15	T 5
T 14	800Hz 0.25sec on, 1 sec off Intermittent	T 4	T 5
T 15	800Hz Continuous	T 2	T 5
T 16	660Hz 150mS on, 150mS off Intermittent	T 18	T 5
T 17	544Hz (100mS)/440Hz (400mS) - NF S 32-001	T 2	T 27
T 18	660Hz 1.8sec on, 1.8sec off Intermittent	T 2	T 5
T 19	1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s -NFC48-265	T 2	T 5
T 20	660Hz Continuous	T 2	T 5
T 21	554Hz/440Hz @ 1Hz Alternating	T 2	T 5
T 22	544Hz @ 0.875 sec. Intermittent	T 2	T 5
T 23	800Hz @ 2Hz Intermittent	T 6	T 5
T 24	800/1000Hz @ 50Hz Sweeping	T 29	T 5
T 25	2400/2900Hz @ 50Hz Sweeping	T 29	T 5
T 26	Bell	T 2	T 15
T 27	554Hz Continuous	T 26	T 5
T 28	440Hz Continuous	T 2	T 5
T 29	800/1000Hz @ 7Hz Sweeping	T 7	T 5
T 30	300Hz Continuous	T 2	T 5
T 31	660/1200Hz @ 1Hz Sweeping	T 26	T 5
T 32	Two T chime.	T 26	T 15
T 33	745Hz @ 1Hz Intermittent	T 2	T 5

<b>S 1</b>	<b>Description</b>	<b>S 2</b>	<b>S 3</b>
T 34	1000 & 2000Hz @ 0.5 sec Alternating - Singapore	T 38	T 45
T 35	420Hz @ 0.625 sec Australian Alert	T 36	T 5
T 36	500-1200Hz 3.75sec /0.25sec. Australian Evac.	T 35	T 5
T 37	1000Hz Continuous - PFEER Toxic Gas	T 9	T 45
T 38	2000Hz Continuous	T 34	T 45
T 39	800Hz 0.25sec on, 1 sec off Intermittent	T 23	T 17
T 40	544Hz (100mS)/440Hz (400mS) - NF S 32-001	T 31	T 27
T 41	Motor Siren - slow rise to 1200 Hz	T 2	T 5
T 42	Motor Siren - slow rise to 800 Hz	T 2	T 5
T 43	1200 Hz Continuous	T 2	T 5
T 44	Motor Siren - slow rise to 2400 Hz	T 2	T 5
T 45	1KHz 1s on, 1s off Intermittent - PFEER Gen. ...	T 38	T 34

**E2S Warning Signals** sales@e2s.com www.e2s.com

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22 Jul 2019

# GNExCP7-PT Tool Reset Manual Signaling Box Call Point

The GNExCP7-PT tool reset push button Ex d explosion proof manual call points feature a robust GRP enclosure with a 316 stainless steel mechanism and IP66/67 rating – manufactured for the harshest of hazardous environments.

Globally approved to IECEx, ATEX, UL and cUL standard for all Zone 1, 2, 21 & 22 and Class I/II Div 2 installations. Can also be specified for applications requiring compliance to the UL38 standard for Manual Signaling Boxes for Fire Alarm Systems or ULC-S528 Manual Stations For Fire Alarm Systems. Available with DIN rail terminals or the innovative E2S termination board with dedicated connections for field installed EOL and/or series devices. SIL 2 compliant to IEC 61508 (2010).

## Features

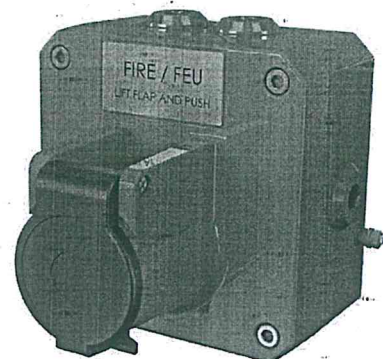
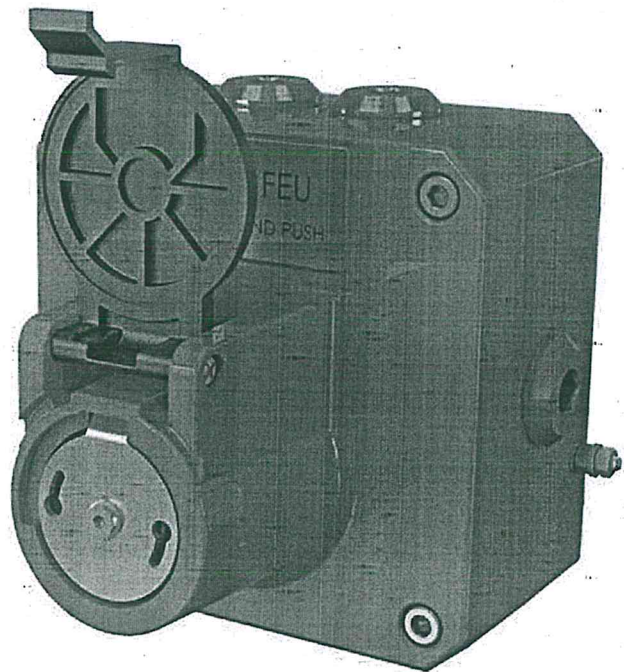
- Robust corrosion proof GRP enclosure
- Anti-static & UV stable
- Ingress protection IP66/67
- Single or double switch (SPCO/DPCO)
- 316 (A4) stainless steel mechanism
- Latching lift flap
- 3 x cable entries, 2 x stopping plugs included
- Captive stainless steel fasteners

## Approvals

- UL/cUL certificate: 20190604-E482536, 20200224-E513632
- IECEx certificate: IECEx ULD 19.0007X
- ATEX certificate: DEMKO 19 ATEX 2101X
- PESO CCOE certified: P471512
- SIL 2 compliant to IEC 61508 (2010)

## Coding

- NEC / CEC:
    - Class I Div 2 Group ABCD T5 Ta -55°C to +70°C \*
    - Class I Div 2 Group ABCD T6 Ta -55°C to +60°C
    - Class II Div 2 Group FG T4 Ta -55°C to +60°C #
    - Class III Div 1 & 2 Ta -55°C to +60°C #
  - NEC:
    - Class I Zone 1 AEx db IIC T5 Gb (Ta -55°C to +70°C) \*
    - Class I Zone 1 AEx db IIC T6 Gb (Ta -55°C to +60°C)
    - Zone 21 AEx tb IIIC T135°C Db (Ta -55°C to +70°C) \*
    - Zone 21 AEx tb IIIC T125°C Db (Ta -55°C to +60°C)
  - CEC:
    - Class I Zone 1 Ex db IIC T5 Gb X (Ta -55°C to +70°C) \*
    - Class I Zone 1 Ex db IIC T6 Gb X (Ta -55°C to +60°C)
    - Zone 21 Ex tb IIIC T135°C Db (Ta -55°C to +70°C) \*
    - Zone 21 Ex tb IIIC T135°C Db (Ta -55°C to +70°C)
  - IECEx & ATEX:
    - II 2G Ex db IIC T5 Gb Ta. -55 to +70°C
    - II 2G Ex db IIC T6 Gb Ta. -55 to +60°C
    - II 2D Ex tb IIIC T90°C Db Ta. -55° to +70°C
- \*: F1 version only  
#: F1 version +70°C



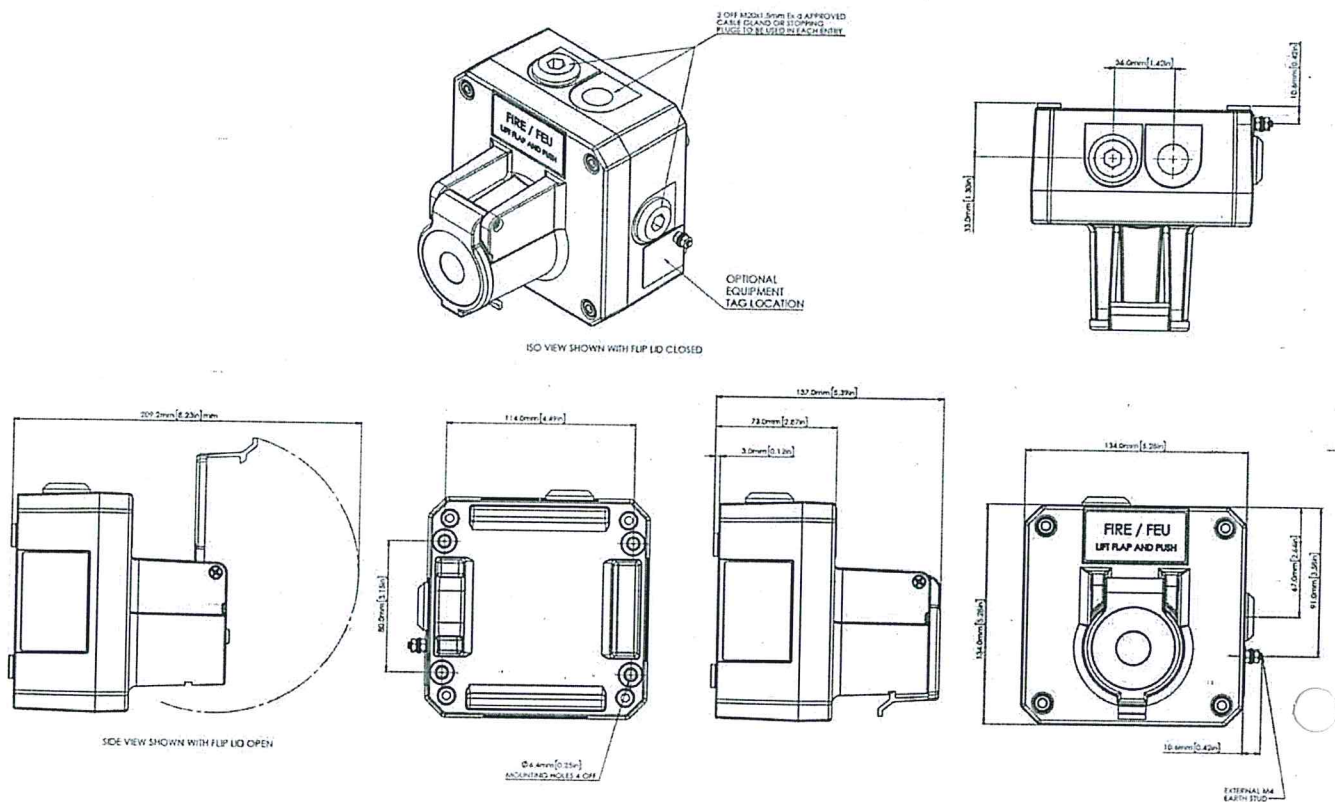


## Specification

GNExCP7-PT:	Latching push button with tool reset	
Temp. Range:	-55°C to +60°C/+70°C	
Ingress protection:	EN/IEC 60529 – IP66/67	
Enclosure matl:	GRP Glass Reinforced Polyester	
Colour:	RAL3000 Red Other solid and striped colours available	
Cable entries:	2 x M20x1.5 top and 1 x M20x1.5 side. Back box can be rotated to give 2 x bottom and 1 x side entries Cable entries adaptable to 1/2"NPT, 3/4"NPT & M25	
Stopping plugs:	2 x Stopping plugs as standard Brass, Nickel plated or Stainless Steel	
Terminals:	DIN rail 8 x 2.5mm <sup>2</sup> SAK2.5 or Termination board featuring 6 x 2.5mm <sup>2</sup> terminals plus 4 x dedicated EOL & Series terminals	
Earth:	External M5 earth connection	
Relative Humidity:	R.H. 95% @ 20°C	
Weight:	2.1Kg/4.63lbs	
Voltage Range:	Max input Current:	Limitations for EOL / Series Resistors:
250Vac Max	3.33A max	not permitted
48Vdc Max	1.0A max	min. 2.2kOhm
24Vdc Max	3.0A max	min. 470 Ohm
EOL and Series Diode Values:		
xxx:	Zener Value	Max. current supply permitted
3V3	3.3V Diode	230mA
4V7	4.7V Diode	162mA
5V1	5.1V Diode	149mA
5V6	5.6V Diode	136mA
6V2	6.2V Diode	122mA
6V8	6.8V Diode	112mA
10V	10V Diode	76mA
12V	12V Diode	63mA

## Part Codes

Version:	Part reference:	Description:
Product type:	GNExCP7PT Latching push button with tool reset	
Switch Type: [s]	S	SPCO/SPDT
	D	DPCO/DPDT
Terminals: [t]	D	DIN Rail 8 x SAK2.5
	P	Termination board: 6 x 2.5mm <sup>2</sup> terminals plus 4 x EOL & Series terminals
Lift flap: [l]	L	Lift flap supplied as standard
Cable Entry Type: [e]	A	3 x M20x1.5mm
	B	2 x 1/2" NPT – adaptors
	C	2 x 3/4" NPT – adaptors
	D	2 x M25x1.5mm – adaptors
	E	1 x 1/2" NPT – adaptor
	F	1 x 3/4" NPT – adaptor
	G	1 x M25x1.5mm – adaptor
Stopping plug material: [m]	B	Brass
	P	Nickel Plated Brass
	S	Stainless Steel
Duty label / Equipment tag: [d]:	1	No Duty label, no Equip. tag
	2	Duty label Stainless Steel
	3	Duty label St/St + Equip. tag
	4	Duty label Metalised Polyester
	5	Duty label M. Poly. + Equip. tag
	6	Equip. tag only
	7	Special label requirement
Product version: [v]	A1	UL, cUL, IECEx, ATEX & PESO approved
	F1	UL, cUL, ULC, IECEx, ATEX & PESO approved – UL38 & ULC-S528
Enclosure colour: [x]	R	Red
	B	Blue
	N	Green
	Y	Yellow
	V	Red/White
	S	Yellow/Black
	K	Black
	M	Magenta
	Z	Red/Black
Default variable: [u]	N	Default = N – not currently used
E.O.L. Module: [e] optional	ExxxR	Resistor value in Ohms e.g. E470R = 470 Ohm
	ED1	Diode IN4007 = ED1
	ExxxZ	Zener diode e.g. E5V1Z = 5.1V
Series Module: [s] optional	SxxxR	Resistor value in Ohms e.g. S1K5R = 1.5K Ohm
	SD1	Diode IN4007 = SD1
	SxxxZ	Zener diode e.g. S5V1Z = 5.1V
Note:	F1 version only available with Duty label option 2 or 3. Mandatory duty label: "FIRE/FEU" F1 version only available with Red enclosure	
Spares:		
SP70-0074	Spare GNExCP7-PT Reset Key	
Accessories:		
SP65-0001-A2	Pole Mount Bracket Kit 2" St/St A2 (304)	
SP65-0001-A4	Pole Mount Bracket Kit 2" St/St A4 (316)	
SP65-0002-A2	Sunshade – St/St A2 (304)	
SP65-0002-A4	Sunshade – St/St A4 (316)	





1-31-030 / Non-sparking signals

# E2xBL2 Multi-function LED Beacon & Status Light



The hazardous location E2xBL2 LED beacon and status light is UL/cULs approved for Class I Div 2, Class II Div 2, Class I Zone 2/22 as well as IECEx and ATEX certified for Zone 2 and 22 applications.

The hazardous area E2xBL2 LED status light & beacon utilises an array of high power Cree® LED's, orientated to optimise visibility in any direction.

The beacon can be configured as a steady beacon for status indicator use, with a light output of up to 87 candela. Alternatively one of the five flashing modes, with a light output of up to 160 candela, may be used for warning applications. DC voltage versions feature three remotely selectable stages enabling multiple warnings to be signalled from one device.

The UV stable colour filter enhances the light output and is field replaceable.

## Features

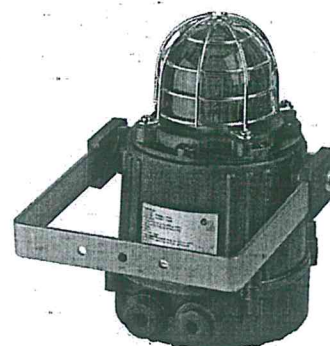
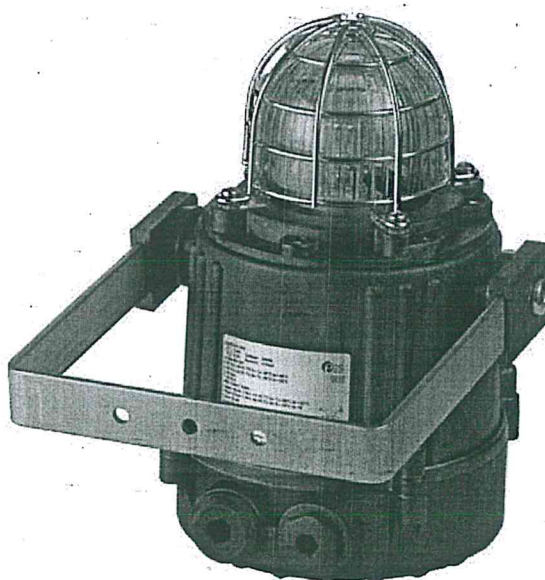
- Very large termination area.
- Ingress protection IP66/67
- Choice of five flash rates: 1Hz, 1.5Hz, 2Hz, double and triple flash.
- High and low power Steady On modes
- Three remotely selectable stages/channels on DC versions.
- Glass lens & Stainless Steel guard
- UV stable PC field replaceable lens colour filter
- Stainless steel fixings
- Dual cable entries
- Duplicate cable terminations (in & out for daisy-chain installations)
- Ratchet adjustable stainless steel 'U' bracket.

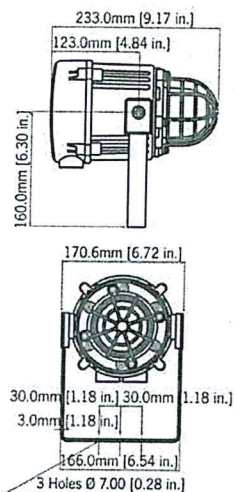
## Approvals

- ATEX certificate: DEMKO 06 ATEX 0421554X
- IECEx certificate: IECEx ULD 14.0012X
- UL/cUL File ref: E245313

## Coding

- ATEX / IECEx certification
  - II 3G Ex nA IIC Gc T4 Ta -20°C to +55°C
  - II 3D Ex tb IIIC Dc T85°C Ta -20°C to +55°C
- NEC Class / Zone ratings US
  - Class I Zone 2 AEx nA IIC Gc T4 Ta -20°C to +55°C
  - AEx tb IIIC Dc T85°C Ta -20°C to +55°C
- CEC Class / Zone ratings Canada
  - Ex nA IIC Gc T4 Ta -20°C to +55°C
  - Ex nA IIC Gc T4A Ta -20°C to +40°C
  - Ex tb IIIC Dc T85°C Ta -20°C to +55°C
- NEC & CEC Class / Division Ratings for US / Canada
  - Class I, Div 2, ABCD T4A Ta -20°C to +55°C
  - Class II, Div 2, FG T6 Ta -20°C to +55°C
  - Class III, Div 1&2 Ta -20°C to +55°C





## Specification

Source:	Array of 4 x High Power Cree® LED's
Modes:	1Hz flash (60 fpm) 1.5Hz flash (90 fpm) 2Hz flash (120 fpm) Double strike flash Triple strike flash High Power Steady Low Power Steady
Eff. Intensity cd:	87 cd - High Power Steady
Eff. Intensity cd:	160 cd - 1Hz flash
Lens colours:	Amber, Blue, Clear, Green, Magenta, Red & Yellow
Voltages DC:	24V dc (18-54V dc)
Voltages AC:	115V ac; 230V ac
Ingress protection:	IP rating per EN60079-0:IP64 IP rating per EN60529:IP66 Type rating per UL50E/NEMA250:4/4X/13
Enclosure material:	UL94V0 PPS & ABS
Lens material:	Borosilicate glass dome with PC prismatic lens cover.
Guard:	Stainless Steel dome guard as standard
Cable entries:	Dual M20x1.5 or 1/2"NPT
Terminals:	0.5 - 2.5mm <sup>2</sup> (20-14 AWG)
Line monitoring:	Blocking diode included EOL can be factory fitted
LED life:	60,000 hours
Operating temp:	-20 to +55°C [-4° to +131°F]
Storage temp:	-40 to +70°C [-40° to +158°F]
Relative humidity:	90% at 20°C [68°F]
Weight:	1.48kg/3.25lbs
* All candela data is representative of performance with clear lens at optimum voltage.	

## Part Codes

Part Code:	Ident.:	Description:
Product type:	E2xBL2	LED Beacon/Status Light
Voltage:	AC115 AC230 DC024	115V ac 50/60Hz 230V ac 50/60Hz 24V dc (18-54Vdc)
Cable entries: [e]	A B C	M20x1.5 & ½" NPT M20x1.5 & M20x1.5 ½" NPT & ½" NPT
Stopping plug material: [m]	N	Nylon
Bracket & Guard & tag: [s]	1 2 3 4	304 A2 Stainless Steel 316 A4 Stainless Steel 304 A2 Stainless Steel & Equip. Tag 316 A4 Stainless Steel & Equip. Tag
Version: [v]	A1	UL, cULs, IECEx & ATEX
Enclosure: [x]	B	Black
Lens colour: [y]	A, B, C G, M, R Y	Amber, Blue, Clear Green, Magenta, Red Yellow

## Current Consumption

Version:	Voltage:	Steady High Power Current:	Steady Low Power Current:	Flashing 1Hz Current:
24V dc	18-54V dc	240mA	134mA	110mA
115V ac	103.5-126.5V ac 50/60Hz	95mA	78mA	90mA
230V ac	207-253V ac 50/60Hz	48mA	37mA	45mA

## Multi-function patterns

Stage 1: [On, board]	Stage 2: [Remote]	Stage 3: [Remote]
Steady High Power	Flashing 1Hz	Triple Strike
Steady Low Power	Flashing 1Hz	Triple Strike
Flashing 1Hz	2x Flash 2Hz	Triple Strike
Flashing 1.5Hz	Flashing 2Hz	Double Strike
Flashing 2Hz	Triple Strike	Triple Strike
Double Strike	Steady High Power	Triple Strike
Triple Strike	Flashing 2Hz	Double Strike

Note: Remote second and third stage on DC units only

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12 Apr 2019



1-31-030 / Non-sparking signals

# E2xBL2 Multi-function LED Beacon & Status Light



The hazardous location E2xBL2 LED beacon and status light is UL/cULs approved for Class I Div 2, Class II Div 2, Class I Zone 2/22 as well as IECEx and ATEX certified for Zone 2 and 22 applications.

The hazardous area E2xBL2 LED status light & beacon utilises an array of high power Cree® LED's, orientated to optimise visibility in any direction.

The beacon can be configured as a steady beacon for status indicator use, with a light output of up to 87 candela. Alternatively one of the five flashing modes, with a light output of up to 160 candela, may be used for warning applications. DC voltage versions feature three remotely selectable stages enabling multiple warnings to be signalled from one device. The UV stable colour filter enhances the light output and is field replaceable.

## Features

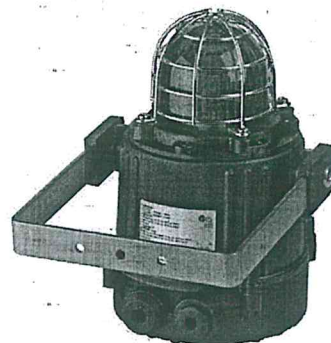
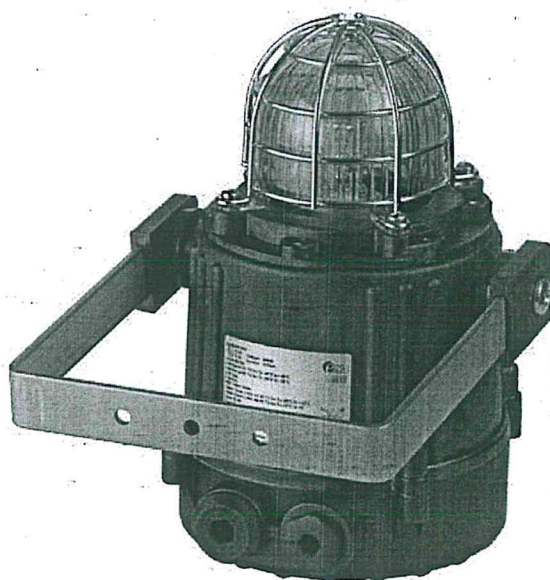
- Very large termination area.
- Ingress protection IP66/67
- Choice of five flash rates: 1Hz, 1.5Hz, 2Hz, double and triple flash.
- High and low power Steady On modes
- Three remotely selectable stages/channels on DC versions.
- Glass lens & Stainless Steel guard
- UV stable PC field replaceable lens colour filter
- Stainless steel fixings
- Dual cable entries
- Duplicate cable terminations (in & out for daisy-chain installations)
- Ratchet adjustable stainless steel 'U' bracket.

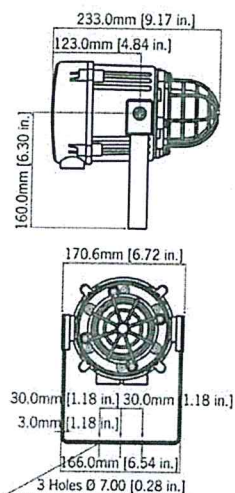
## Approvals

- ATEX certificate: DEMKO 06 ATEX 0421554X
- IECEx certificate: IECEx ULD 14.0012X
- UL/cUL File ref: E245313

## Coding

- ATEX / IECEx certification
  - II 3G Ex nA IIC Gc T4 Ta -20°C to +55°C
  - II 3D Ex tb IIIC Dc T85°C Ta -20°C to +55°C
- NEC Class / Zone ratings US
  - Class I Zone 2 AEx nA IIC Gc T4 Ta -20°C to +55°C
  - AEx tb IIIC Dc T85°C Ta -20°C to +55°C
- CEC Class / Zone ratings Canada
  - Ex nA IIC Gc T4 Ta -20°C to +55°C
  - Ex nA IIC Gc T4A Ta -20°C to +40°C
  - Ex tb IIIC Dc T85°C Ta -20°C to +55°C
- NEC & CEC Class / Division Ratings for US / Canada
  - Class I, Div 2, ABCD T4A Ta -20°C to +55°C
  - Class II, Div 2, FG T6 Ta -20°C to +55°C
  - Class III, Div 1&2 Ta -20°C to +55°C





## Specification

Source:	Array of 4 x High Power Cree® LED's
Modes:	1Hz flash (60 fpm) 1.5Hz flash (90 fpm) 2Hz flash (120 fpm) Double strike flash Triple strike flash High Power Steady Low Power Steady
Eff. Intensity cd:	87 cd - High Power Steady
Eff. Intensity cd:	160 cd - 1Hz flash
Lens colours:	Amber, Blue, Clear, Green, Magenta, Red & Yellow
Voltages DC:	24V dc (18-54V dc)
Voltages AC:	115V ac; 230V ac
Ingress protection:	IP rating per EN60079-0:IP64 IP rating per EN60529:IP66 Type rating per UL50E/NEMA250:4/4X/13
Enclosure material:	UL94V0 PPS & ABS
Lens material:	Borosilicate glass dome with PC prismatic lens cover.
Guard:	Stainless Steel dome guard as standard
Cable entries:	Dual M20x1.5 or 1/2" NPT
Terminals:	0.5 - 2.5mm² (20-14 AWG)
Line monitoring:	Blocking diode included EOL can be factory fitted
LED life:	60,000 hours
Operating temp:	-20 to +55°C [-4° to +131°F]
Storage temp:	-40 to +70°C [-40° to +158°F]
Relative humidity:	90% at 20°C [68°F]
Weight:	1.48kg/3.25lbs
* All candela data is representative of performance with clear lens at optimum voltage.	

## Part Codes

Part Code:	Ident.:	Description:
Product type:	E2xBL2	LED Beacon/Status Light
Voltage:	AC115 AC230 DC024	115V ac 50/60Hz 230V ac 50/60Hz 24V dc (18-54Vdc)
Cable entries: [e]	A B C	M20x1.5 & ½" NPT M20x1.5 & M20x1.5 ½" NPT & ½" NPT
Stopping plug material: [m]	N	Nylon
Bracket & Guard tag: [s]	1 2 3 4	304 A2 Stainless Steel 316 A4 Stainless Steel 304 A2 Stainless Steel & Equip. Tag 316 A4 Stainless Steel & Equip. Tag
Version: [v]	A1	UL, cULs, IECEx & ATEX
Enclosure: [x]	B	Black
Lens colour: [y]	A, B, C G, M, R Y	Amber, Blue, Clear Green, Magenta, Red Yellow

## Current Consumption

Version:	Voltage:	Steady High Power Current:	Steady Low Power Current:	Flashing 1Hz Current:
24V dc	18-54V dc	240mA	134mA	110mA
115V ac	103.5-126.5V ac 50/60Hz	95mA	78mA	90mA
230V ac	207-253V ac 50/60Hz	48mA	37mA	45mA

## Multi-function patterns

Stage 1: [On board]	Stage 2: [Remote]	Stage 3: [Remote]
Steady High Power	Flashing 1Hz	Triple Strike
Steady Low Power	Flashing 1Hz	Triple Strike
Flashing 1Hz	2x Flash 2Hz	Triple Strike
Flashing 1.5Hz	Flashing 2Hz	Double Strike
Flashing 2Hz	Triple Strike	Triple Strike
Double Strike	Steady High Power	Triple Strike
Triple Strike	Flashing 2Hz	Double Strike

Note: Remote second and third stage on DC units only

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12 Apr 2019





## PS10 SERIES PRESSURE SWITCH



### Ordering Information

Model	Description	Stock No.
PS10-1	Pressure switch with one set SPDT contacts	1340103
PS10-2	Pressure switch with two sets SPDT contacts	1340104
	Hex Key	5250062
	Cover Tamper Switch Kit	0090200

### Tamper

Cover incorporates tamper resistant fastener that requires a special key for removal. One key is supplied with each device. For optional cover tamper switch kit, order Stock No. 0090200. See bulletin #5401200 PSCTSK.

### Installation

The Potter PS10 Series Pressure Actuated Switches are designed for the detection of a waterflow condition in automatic fire sprinkler systems of particular designs such as wet pipe systems with alarm check valves, dry pipe, preaction, or deluge valves. The PS10 is also suitable to provide a low pressure supervisory signal; adjustable between 4 and 15 psi (0.27 and 1.03 BAR).

1. Apply Teflon tape to the threaded male connection on the device. (Do not use pipe dope)
2. Device should be mounted in the upright position (threaded connection down).
3. Tighten the device using a wrench on the flats on the device.

### Wiring Instructions

1. Remove the tamper resistant screw with the special key provided.
2. Carefully place a screwdriver on the edge of the knockout and sharply apply a force sufficient to dislodge the knockout plug. See Fig 9
3. Run wires through an approved conduit connector and affix the connector to the device.
4. Connect the wires to the appropriate terminal connections for the service intended. See Figures 2,4,5, and 6. See Fig 7 for two switch, one conduit wiring.

### Testing

The operation of the pressure alarm switch should be tested upon completion of installation and periodically thereafter in accordance with the applicable NFPA codes and standards and/or the authority having jurisdiction (manufacturer recommends quarterly or more frequently).

### Wet System

Method 1: When using PS10 and control unit with retard - connect PS10

UL, cUL, and CSFM Listed, FM and LPC Approved, NYMEA Accepted, CE Marked

Dimensions: 3.78" (9.6cm)W x 3.20" (8.1cm)D x 4.22" (10.7cm)H

Conduit Entrance: Two knockouts provided for 1/2" conduit. Individual switch compartments and ground screws suitable for dissimilar voltages.

Enclosure: Cover - Die-cast with textured red powdercoat finish, single cover screw and rain lip.

Base - Die-cast

Pressure Connection: Nylon 1/2" NPT Male

Factory Adjustment: 4 - 8 PSI (0.27 - 0.55 BAR)

Differential: 2 PSI (0.13 BAR) typical

Maximum System Pressure: 300 PSI (20.68 BAR)

Switch Contacts: SPDT (Form C)

10.1 Amps at 125/250VAC, 2.0 Amps at 30VDC

One SPDT in PS10-1, Two SPDT in PS10-2

### Environmental Specifications:

NEMA 4/IP66 Rated Enclosure - indoor or outdoor when used with NEMA 4 conduit fittings.

Temperature range: -40°F to 140°F (-40°C to 60°C)

### Service Use:

Automatic Sprinkler	NFPA-13
One or two family dwelling	NFPA-13D
Residential Occupancy up to four stories	NFPA-13R
National Fire Alarm Code	NFPA-72

into alarm port piping on the input side of retard chamber and electrically connect PS10 to control unit that provides a retard to compensate for surges. Insure that no unsupervised shut-off valves are present between the alarm check valve and PS10.

Method 2: When using the PS10 for local bell application or with a control that does not provide a retard feature - the PS10 must be installed on the alarm outlet side of the retard chamber of the sprinkler system.

Testing: Accomplished by opening the inspector's end-of-line test valve. Allow time to compensate for system or control retard.

Note: Method 2 is not applicable for remote station service use, if there is an unsupervised shut-off valve between the alarm check valve and the PS10.

### Wet System With Excess Pressure

Connect PS10 into alarm port piping extending from alarm check valve. Retard provisions are not required. Insure that no unsupervised shut-off valves are present between the alarm check valve and the PS10.

Testing: Accomplished by opening the water by-pass test valve or the inspector's end-of-line test valve. When using end-of-line test, allow time for excess pressure to bleed off.

### Dry System

Connect PS10 into alarm port piping that extends from the intermediate chamber of the alarm check valve. Install on the outlet side of the in-line check valve of the alarm port piping. Insure that no unsupervised shut-off valves are present between the alarm check valve and the PS10.

Testing: Accomplished by opening the water by-pass test valve.

Note: The above tests may also activate any other circuit closer or water motor gongs that are present on the system.

Potter Electric Signal Company, LLC • St. Louis, MO • Phone: 866-956-0988/Canada 888-882-1833 • [www.pottersignal.com](http://www.pottersignal.com)

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MFG. #5400928 - REV D-1  
12/10

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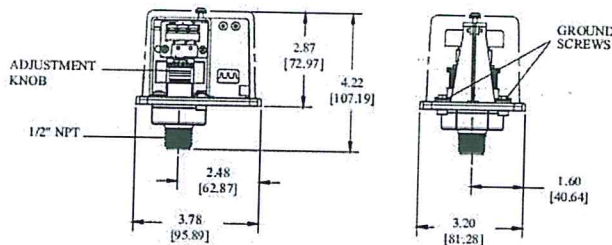
## POTTER

The Symbol of Protection

## PS10 SERIES PRESSURE SWITCH

### Dimensions

Fig. 1

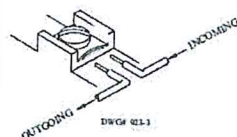


NOTE: To prevent leakage, apply Teflon tape sealant to male threads only.

DWG# 930-1

### Switch Clamping Plate Terminal

Fig. 2

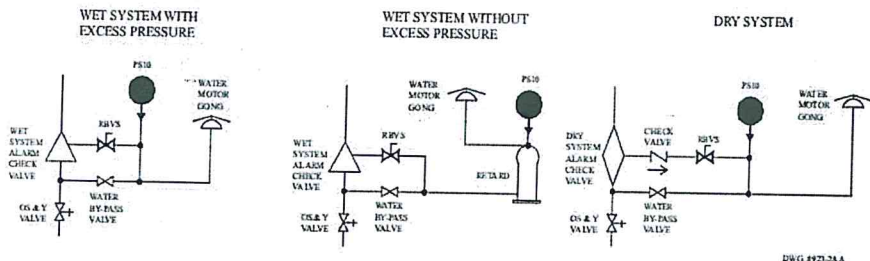


### WARNING

An uninsulated section of a single conductor should not be looped around the terminal and serve as two separate connections. The wire must be severed, thereby providing supervision of the connection in the event that the wire becomes dislodged from under the terminal.

### Typical Sprinkler Applications

Fig. 3



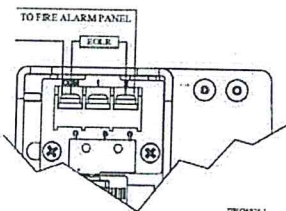
DWG# 932-3AA

### CAUTION

Closing of any shutoff valves between the alarm check valve and the PS10 will render the PS10 inoperative. To comply with NFPA-72 any such valve shall be electrically supervised with a supervisory switch such as Potter Model RBVS.

### Low Pressure Signal Connection

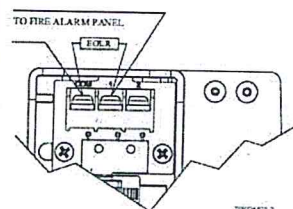
Fig. 4



DWG# 933-1

### Waterflow Signal Connection

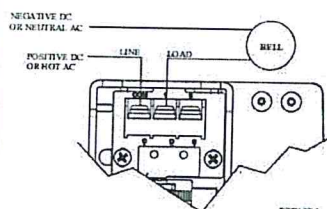
Fig. 5



DWG# 933-2

### Local Bell For Waterflow Connection

Fig. 6



DWG# 933-1

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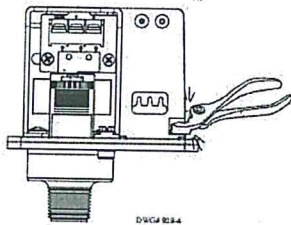


## PS10 SERIES PRESSURE SWITCH

### One Conduit Wiring

Fig. 7

Break out thin section of divider to provide path for wires when wiring both switches from one conduit entrance.



### Switch Operation

Fig. 8

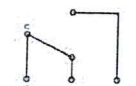
Terminal

C: Common

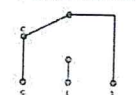
1: Closed when installed under normal system pressure.

2: Open when installed under normal system pressure. Closes on pressure drop. Use for low pressure supervision.

W/ PRESSURE APPLIED

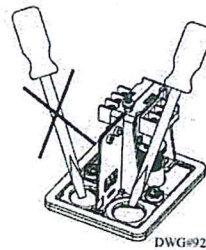


W/O PRESSURE APPLIED



### Removing Knockouts

Fig. 9



### WARNING

- Installation must be performed by qualified personnel and in accordance with all national and local codes and ordinances.
- Shock hazard. Disconnect power source before servicing. Serious injury or death could result.
- Read all instructions carefully and understand them before starting installation. Save instructions for future use. Failure to read and understand instructions could result in improper operation of device resulting in serious injury or death.
- Risk of explosion. Not for use in hazardous locations. Serious injury or death could result.

### CAUTION

- Do not tighten by grasping the switch enclosure. Use wrenching flats on the bushing only. Failure to install properly could damage the switch and cause improper operation resulting in damage to equipment and property.
- To seal threads, apply Teflon tape to male threads only. Using joint compounds or cement can obstruct the pressure port inlet and result in improper device operation and damage to equipment.
- Do not over tighten the device, standard piping practices apply.

### Engineer/Architect Specifications Pressure Type Waterflow Switch

Pressure type waterflow switches shall be a Model PS10 as manufactured by Potter Electric Signal Company, St Louis MO., and shall be installed on the fire sprinkler system as shown and or specified herein.

Switches shall be provided with a 1/2" NPT male pressure connection and shall be connected to the alarm port outlet of: Wet Pipe Alarm Valves, Dry Pipe Valves, Pre-Action Valves, or Deluge Valves. The pressure switch shall be actuated when the alarm line pressure reaches 4 - 8 PSI (0.27 - 0.55 BAR).

Pressure type waterflow switches shall have a maximum service pressure rating of 300 PSI (20.68 BAR) and shall be factory adjusted to operate on a pressure increase of 4 - 8 PSI (0.27 - 0.55 BAR)

Pressure switch shall have one or two form C contacts, switch contact rating 10.1 Amps at 125/250 VAC, 2.0 Amps at 30 VDC.

Pressure type waterflow switches shall have two conduit entrances one for each individual switch compartment to facilitate the use of dissimilar voltages for each individual switch.

The cover of the pressure type waterflow switch shall be Zinc die-cast with rain lip and shall attach with one tamper resistant screw. The pressure type waterflow switch shall be suitable for indoor or outdoor service with a NEMA 4/IP66 rating.

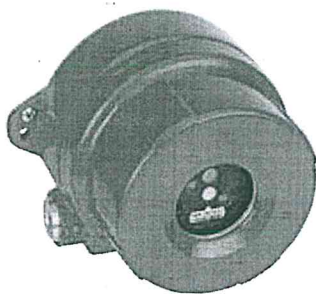
The pressure type waterflow switch shall be UL Ulc and CSFM listed, FM and LPC approved and NYMEA accepted.

# FS24X Detector

FS24X is a quantum leap in flame and fire detection with its sophisticated software and detection technology.

The FS24X is the latest generation high technology Multi-Spectrum Triple IR (IR/IR/IR/Visible) Fire and Flame Detector, which is part of our FSX family of advanced technology Electro-Optical fire detectors. Using our patented WideBand IR™, WideBand 4,3 micron IR™, and Visible detection technology, the FS24X is a quantum leap in flame and fire detection. Sophisticated software algorithms and dual microprocessors ensure that the FS24X has the highest fire detection performance combined with optimal false alarm rejection.

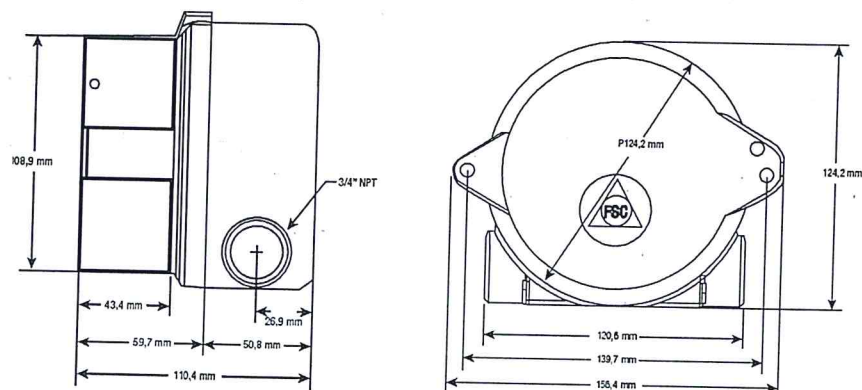
The WideBand IR™ Infrared technology using high-speed solid-state Quantum sensors allows detection of all types of fires, hydrocarbon and non-hydrocarbon, in all weather conditions. If the detector's signal is blocked by ordinary window glass, the patented WideBand IR sensors will still alarm to the fire albeit at a reduced sensitivity and slower response time.



Dual microprocessors provide a high level of fail-safe operation combined with fast and reliable performance. The master microprocessor performs high-speed digital sampling and signal-processing calculations, while the slave microprocessor handles various sensor data, performs communications, self-diagnostics and provides interface versatility and additional memory for storing Event Log and FirePic™ data.


The FSX family of detectors feature our patented FirePic data storage and information retrieval facility. FirePic™ records pre-fire data, which can be recovered from the Detector's non-volatile flash memory for post fire analysis and postulation of the fire cause. Additionally, unique Real-Time Graphing (RTG™) allows viewing of the data which the Detector actually sees. A combination of outputs makes the FS24X a truly versatile detector for today's demanding industrial requirements. The FS24X detector has a detection range greater than 60 m (200 feet) (Very High Sensitivity setting) for the detection of a 0.1 m<sup>2</sup> (one square-foot) Heptane reference fire and has a cone of vision far greater in volumetric coverage than any other Multi-Spectrum IR Detector. This means fewer Detectors can be used as compared to other manufacturers' Detectors.

GENERAL DIMENSIONS  
Side and Back Views  
(All Dimensions in mm)





# General Specification

GENERAL SPECIFICATIONS	
FIELD OF VIEW	FS24X-9: 90° cone of vision, ± 45° from on axis FS24X-2: 110° cone of vision, ± 55° from on axis
SENSITIVITY	Very high (60m), high (45m), medium (30m) and low (1.5m) - switch selectable
RESPONSE TIME	3-5 Seconds to 0.1 m <sup>2</sup> (1 sq. ft.) n-Heptane fire at 30 m (100 ft.) 3-10 Seconds to 0.1 m <sup>2</sup> (1 sq. ft.) n-Heptane fire at 60 m (200 ft.)
SPECTRAL SENSITIVITY	Visible: 400 - 700 nanometres Near Band IR: 0.7 - 1.1 microns Wide Band IR: 1.1 - 3.0 microns Wide Band IR: 3.0 - 5.0 microns
OPERATING VOLTAGE	24 Vdc nominal (18-32 Vdc) - regulated
POWER CONSUMPTION	Operating: 56 mA @ 24 Vdc nominal Alarm: 106 mA @ 24 Vdc nominal Heater: 155 mA - additional Note: Heater will turn on at -17°C (0°F)
OUTPUT RELAYS	Fire Alarm: SPDT (NO / NC) - De-energised/energized, latching/non-latching Fault: SPST (NO) - De-energised, latching/non-latching Auxiliary: SPDT (NO / NC) - De-energised/energized, latching/non-latching Contacts rating: 1 amp @ 24 Vdc
ANALOG OUTPUT	0 - 20 mA stepped - source or sink user selectable
LOOP RESISTANCE	50 - 400 Ohms
COMMUNICATION	One of the following - user selectable: • RS-485, ModBus Protocol • RS-485, FireBus II • RS-485 Special (optional) • HART, Optional plug-in module (not available on EN54-10 units)
VISUAL INDICATORS	Green LED: Power Red LED: Alarm Yellow LED: Fault
TEMPERATURE RANGE	Operating: 110° Field of View FS24X: -40°C to +85°C (-40°F to +185°F); 90° Field of View FS24X: -60°C to +85°C (-76°F to +185°F) Storage: -55°C to +110°C (-67°F to +230°F)
HUMIDITY RANGE	5 to 98% relative humidity, non-condensing
VIBRATION	Meets or exceeds MilSpec 810C Method 514.2, Curve AW12
WIRING	2.5 mm <sup>2</sup> (14 AWG) to 0.326 mm <sup>2</sup> (22 AWG); shielded cable recommended
CONDUIT ENTRIES	Standard: Two M25 or two ¾" NPT
ENCLOSURE MATERIALS	Copper-free powder coated aluminum or 316 stainless steel
ENCLOSURE TYPE	4X, IP66 and NEMA 4
CERTIFICATIONS	FM: Class I, Div. 1 & 2, Groups B, C, & D; Class II, Div. 1 & 2, Groups E, F, & G; Class III ATEX/IECEx: Ⓢ II 2 G Ex db IIC T4 (Ta: -60 to +110°C), T5 (Ta: -60 to +75°C), T6 (Ta: -60 to +60°C), II 2 D Ex tb IIIC T135°C (FS24X-9, 90° Field of View) Ⓢ II 2 G Ex db IIC T4 (Ta: -40 to +110°C), T5 (Ta: -40 to +75°C), T6 (Ta: -40 to +60°C), II 2 D Ex tb IIIC T135°C (FS24X-9, 110° Field of View) CE: Complies with EN6100-6-4 & EN50130-4 INMETRO CU-TR SIL Rating: FMEDA available on request EN54-10:  FS20X certified 11 75a/01 (LPCB); CPR 0832-CPR-F0515
SHIPPING WEIGHT	Aluminum: 1.6 kg (3.6 lbs) Stainless Steel: 3.2 kg (7 lbs)
MOUNTING	Swivel bracket assembly - optional
WARRANTY	Three years from date of shipping

## FEATURES

- Patented WideBand IR™ technology
- Patented Electronic Frequency Analysis™
- Visible sensor for optimum false alarm rejection
- Selectable detection sensitivities
- Field-of-View: 110° cone-of-vision (90° cone-of-vision model also available)
- Dual microprocessors for reliable performance
- Real-time clock for accurate time dating of events
- FirePic™ - pre-fire event data storage
- Event log with date and time stamp
- RS-485 ModBus communication
- Non-isolated 4-20 mA Analog output (sink or source)
- Alarm, Fault and Fire Verification relays
- Automatic optical path and electronic self-test
- Patented Electronics Module for components protection with easy plug-in terminations and field installation
- Two 25 mm or ¾" NPT conduit entries
- Low power consumption
- High RFI and EMI immunity
- FM, ATEX, CE mark approvals
- CU-TR approved
- INMETRO approved
- Meets SIL 2 requirements
- Certified to EN54-10:2002 (FS24X-9) option
- FM 3260 Performance

## BENEFITS

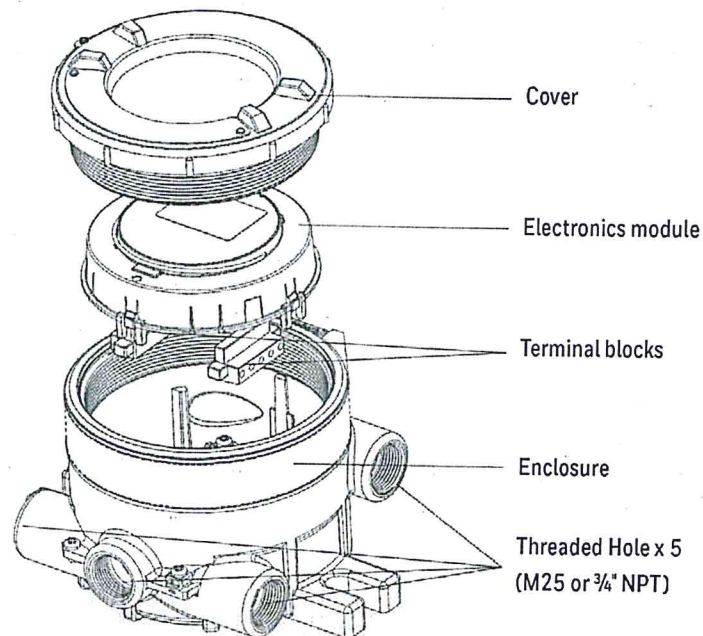
- Detects hydrocarbon and non-hydrocarbon fuel fires in all environmental conditions
- User selectable outputs
- Wide operating temperature range
- Optimal false alarm rejection
- Minimal maintenance for trouble-free operation
- PC software and Interface Module (FSII4) for fault diagnostics, real-time graphics (RTGs), and downloading of FirePics™ and event log
- Suitable for a wide variety of applications
- Easy electronics module replacement
- Test lamps for manual testing

## APPLICATIONS

- Refineries and oil production facilities
- Off-shore platforms
- Turbine/Compressor enclosures
- Oil and gas pipelines and pumping stations
- LNG/LPG loading and unloading facilities
- Natural gas and CNG plants
- Ethanol, Methanol, and IPA production and storage
- Crude oil and gasoline storage and tank farms
- Aircraft hangars
- Paint and solvent storage
- Chemical production, storage, and loading facilities
- Power plants

**WARNING**

When operating in the hazardous location, ensure that the mobile device being used is suitably certified for that area.



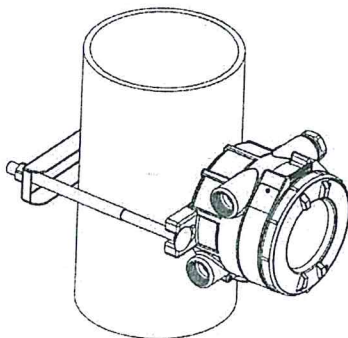
<Figure 1. OELD Exploded View>

## 2.2 Optional Accessories

### Note

The optional pipe mount, ceiling bracket and sunshade accessories are not included as part of the assessment to EN60079-29-1.

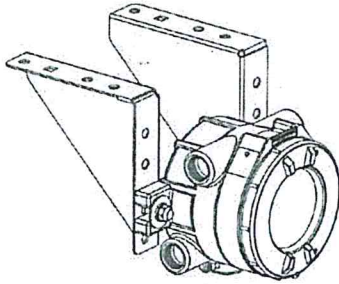
### 2.2.1 Pipe Mount Kit (1226A0358)



<Figure 2. Pipe-Mounted OELD>

The Pipe Mount kit (1226A0358) allows the OELD to be mounted to pipe from 2" to 6" (50 to 150 mm) in diameter. The kit includes the pipe mount bracket, two carriage bolts, nuts, and lock washers.

### 2.2.2 Ceiling Mount Bracket Kit (1226A0355)



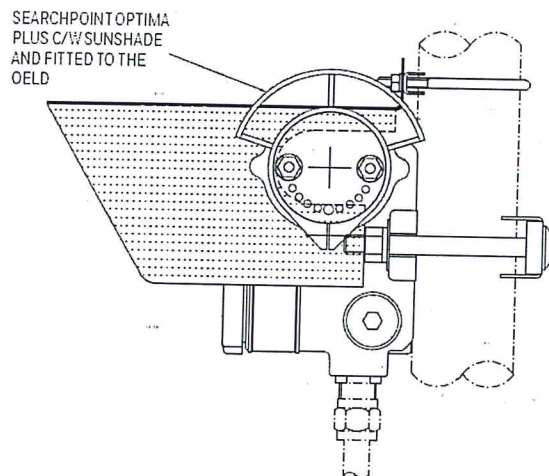
The Ceiling Mount Bracket Kit (1226A0355) allows the OELD to be mounted to the ceiling. The kit includes two stainless steel ceiling mount brackets, bolts, and nuts.

**Note**

When considering the final mounting position using the Ceiling Mount Bracket Kit, consider the ability to see the OELD display when installed.

<Figure 3. Ceiling-Mounted OELD>

### 2.2.3 Sunshade (94000-A-1006)



A sunshade manufactured from 316 stainless steel, is available which covers the OELD and can extend over either side to also provide protection to a Searchpoint Optima or Searchline Excel

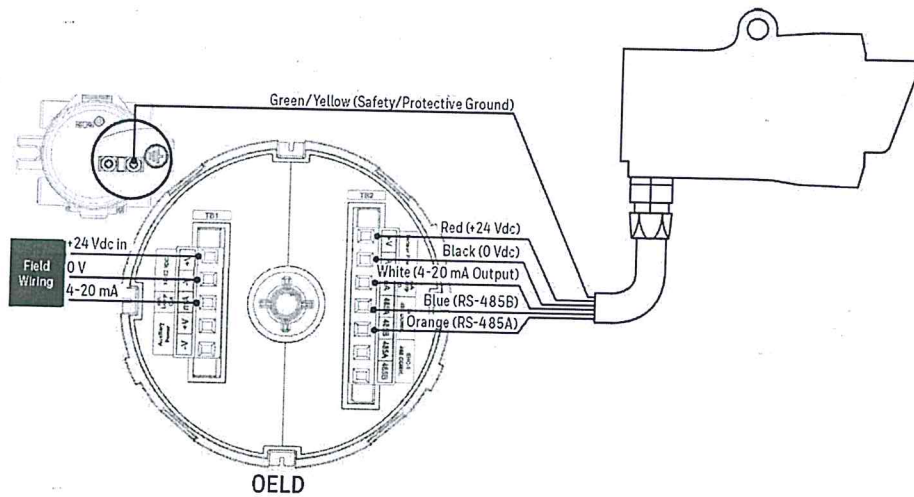
The sunshade slots over the OELD mounting bolts so no additional fixings are required and is stainless steel 316.

Use the sunshade to reduce the effects of direct solar heating.

<Figure 4. OELD with Sunshade>



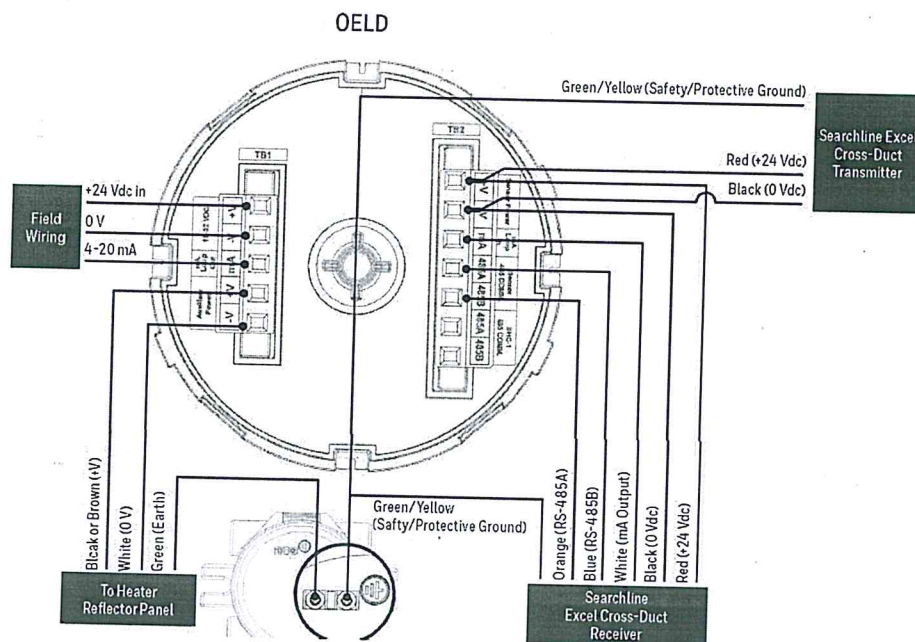
### Connecting the OELD to Searchline Excel



<Figure 10. Wiring Diagram for Searchline Excel>

The earth bonding arrangement must ensure that the maximum peak voltage between the unit case earth and any field cable conductor is less than 350V. Voltages in excess of this can cause permanent damage to the units' internal RFI protection filters.

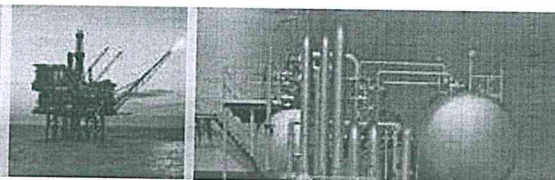
### Connecting the OELD to Searchline Excel Cross-Duct (XD)



<Figure 11. Wiring Diagram for Searchline Excel Cross-Duct>

The earth bonding arrangement must ensure that the maximum peak voltage between the unit case earth and any field cable conductor is less than 350V. Voltages in excess of this can cause permanent damage to the units' internal RFI protection filters.

# Technical Summary

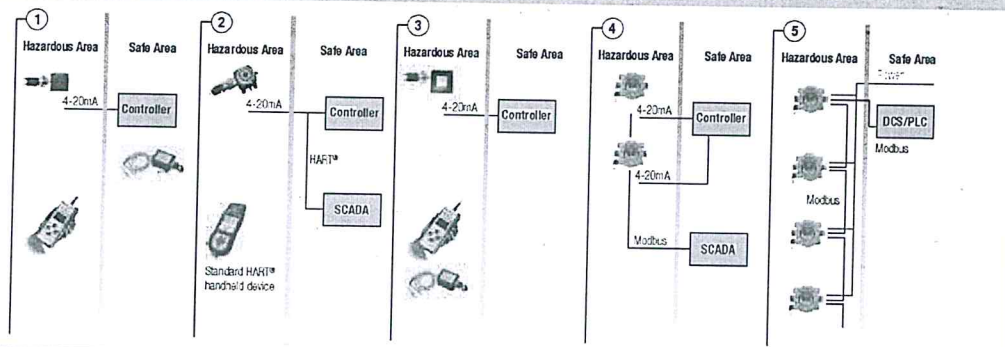


## Searchpoint Optima Plus Specification

Measuring Range	0-100% LEL, wide selection of Hydrocarbon gas and vapour calibrations. Different measuring ranges and solvent calibrations available for specialist applications	
Signal Output	4-20mA autosensing sink or source	
Inhibit	1-3mA (Default 2mA)	
Warning	0-6mA (Default 3mA *)	
Fault	0mA (HART® units adjustable to 1mA)	
Over Range	20-21.5mA (Default 21mA)	
Digital Output	Optional Multidrop Modbus RS485 (via XNX, Optional HART® over 4-20mA output (HART® version /)	
Material	316 stainless steel	
Weight	1.6kg	
Accuracy		
Optima Plus (Hydrocarbon)	Baseline < +1% FSD, 50% FSD < ±2% FSD	
Optima Plus (Ethylene)	Baseline < +2% FSD, 50% FSD < ±3% FSD	
Repeatability	< ±2% FSD at 50% FSD	
Linearity	< 5% FSD	
Response Time	T50 < 3 seconds, T90 < 4 seconds (methane)	
Operational and Certified**	-40°C to +65°C temperature range **CU-TR-EX (Russia) Approval - XTC Version, Certified Temperature Range -60°C to +65°C	
Long Term Stability (as defined in EN 60079-29-1)	Baseline	Methane 100 %LEL Range: ≤ ± 2 %FSD Ethylene 100 %LEL Range: ≤ ± 4 %FSD
	50 %FSD	Methane 100 %LEL Range: ≤ ± 4 %FSD Ethylene 100 %LEL Range: ≤ ± 5 %FSD
Drift Over Temperature Range (-40 °C to 65 °C)	Baseline	≤ ± 2 %FSD
	50 %FSD	Methane 100 %LEL Range: ≤ ± 0.131 %FSD per °C Ethylene 100 %LEL Range: ≤ ± 0.078 %FSD per °C
Variation with Pressure	0.1% (of reading) per mbar	
Power Supply	18-32Vdc (24Vdc nom), < 4.5W max	
Environmental Protection	IP 66 / 67	
Diagnostics (and Re-calibration)	Via certified Hand-held Interrogator, XNX or optional HART® communications	
Safety Approvals	ATEX: Baseefa13/ATEX0296X II 2 GD Ex d op is IIC Gb Ex tb IIIc Db T96°C (T <sub>amb</sub> -40°C to +65°C) T86°C (T <sub>amb</sub> -40°C to +55°C) IP 66/67 UL / CSA: Class 1, Div 1, groups B, C, and D (-40°C to +65°C) IECEx: II 2 GD Ex d op is IIC Gb Ex tb IIIc Db T86°C (T <sub>amb</sub> -40°C to +55°C) or T96°C (T <sub>amb</sub> -40°C to +65°C) IP66/67 CU-TR-EX (Russian Customs Union) - XTC Version 1Ex d op is IIC T5/T4 Gb X (T <sub>amb</sub> -60°C to +65°C)	
Performance Approvals	EN 60079-29-1 (BVS 03 ATEX G 016 X), CSA C22.2 152, FM ANSI/ISA-12.13.01, Russian Pattern Approval (Metrology) - XTC Version ***	
Functional Safety	IEC61508 Safety Integrity Level 2	
EMC Compliance	EN 50270:2006	
Software	EN 50271:2010	
Marine Approvals	Marine Equipment Directive (MED), type approvals from DNV, BV, ABS, Lloyd's Register	

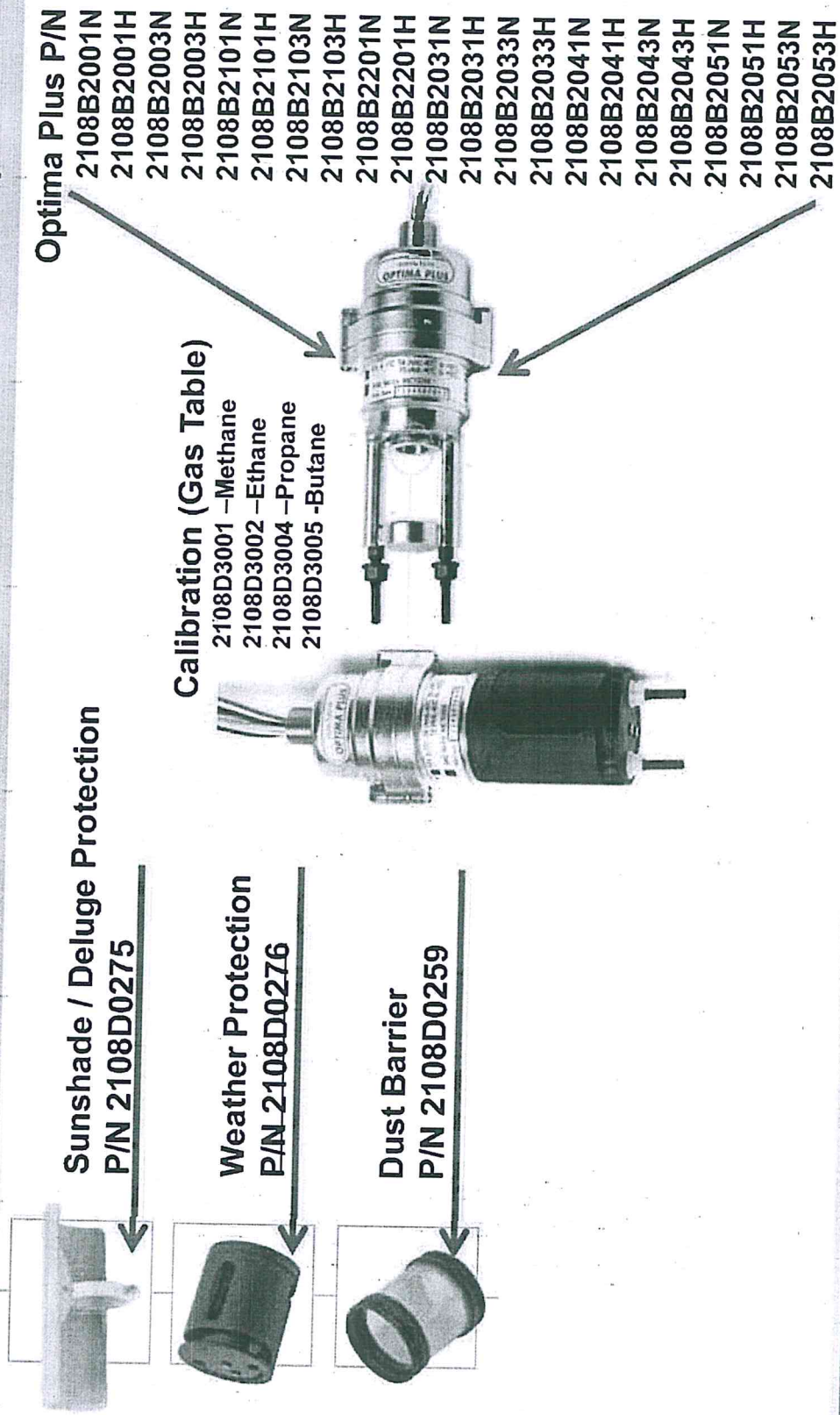
\* Note for ATEX compliance the warning value should not be set between 3 and 5mA  
\*\*\* Please refer to manual for full information

## Installation Options

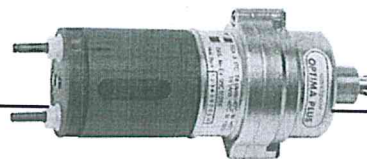




## Optima Plus Part No Decodification 2108N4000N/H



## Searchpoint Optima Plus SPECIFICATIONS



Searchpoint Optima Plus Specification		
Use	Searchpoint Optima Plus is an advanced, Point-Infrared, flammable gas detector certified for use in potentially explosive atmospheres	
Measuring Range	0-100% LEL, wide selection of Hydrocarbon gas and vapor calibrations. Different measuring ranges and solvent calibrations available for specialist applications	
Signal Output	4 20mA autosensing sink or source	
Inhibit	1-3mA (Default 2mA)	
Warning	0-6mA (Default 3mA *)	
Fault	0mA (HART® units adjustable to 1mA)	
Over Range	20-21.5mA (Default 21mA)	
Digital Output	Optional Multidrop Modbus RS485 (via DX100(M)), Optional HART® over 4 20mA output (HART® version 7)	
Material	316 stainless steel	
Weight	1.6kg	
Accuracy	Optima Plus (Hydrocarbon) Baseline < ±1% FSD, 50% FSD < ±2% FSD Optima Plus (Ethylene) Baseline < ±2% FSD, 50% FSD < ±3% FSD	
Repeatability	< ±2% FSD at 50% FSD	
Linearity	< 5% FSD	
Response Time	T50 < 3 seconds, T90 < 4 seconds (methane)	
Operational and Certified	-40°C to +65°C temperature range	
Long Term Stability (as defined in EN 60079-29-1)	Baseline	Methane 100 %LEL Range: ≤ ± 2 %FSD Ethylene 100 %LEL Range: ≤ ± 4 %FSD
	50 %FSD	Methane 100 %LEL Range: ≤ ± 4 %FSD Ethylene 100 %LEL Range: ≤ ± 5 %FSD
Drift Over Temperature Range (-40 °C to 65 °C)	Baseline	≤ ± 2 %FSD
	50 %FSD	Methane 100 %LEL Range: ≤ ± 0.131 %FSD per °C Ethylene 100 %LEL Range: ≤ ± 0.078 %FSD per °C
Variation with Pressure	0.1% (of reading) per mbar	
Power Supply	18-32Vdc (24Vdc nom), < 4.5W max	
Environmental Protection	IP 66 / 67	
Diagnostics (and Re-calibration)	Via certified hand-held Interrogator, or optional HART® communications	
Safety Approvals	UL / CSA: Class 1, Div 1, groups B, C, and D (-40°C to +65°C) IECEx: Ex d IIC tb IIIc T86°C (T <sub>amb</sub> -40°C to +55°C) or T96°C (T <sub>amb</sub> -40°C to +65°C) IP66/67 ATEX: BAS99ATEX2259X II 2 GD Ex d IIC Gb Ex tb IIIc Db T96°C (T <sub>amb</sub> -40°C to +65°C) T86°C (T <sub>amb</sub> -40°C to +55°C) IP 66/67	
Performance Approvals	CSA C22.2 152, FM ANSI/ISA-12.13.01., EN 60079-29-1 (BVS 03 ATEX G 016 X)	
Functional Safety	IEC61508 Safety Integrity Level 2	
EMC Compliance	EN 50270:2006	
Software	EN 50271:2010	

\* Note for ATEX compliance the warning value should not be set between 3 and 5mA

### Find out more

[www.honeywellanalytics.com](http://www.honeywellanalytics.com)

Toll-free: 800.538.0363

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SS0276.v2 4/13

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Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 12.03- Motor Datasheets



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 12.04- Electrical Cables Schedule



PAGE	Cable Mark	GL1	FROM	TO	GL2	Service Voltage	DRUM NO	LENGTH DRUM	Size	Type	L
16	P1- 030-FGS-SC-001	WP	030-SUB-UPDP-1 (L16)	030-FGS-SC-001 PSI	WP	230VAC	11/1/2947/30	2040	3x4	3E	25
16	P2- 030-FGS-SC-001	WP	030-SUB-UPDP-1 (L17)	030-FGS-SC-001 PS2	WP	230VAC	11/1/2947/30	2040	3x4	3E	25
18	P3-030-FGS-SC-001	WP	030-SUB-ASP-1 (Q19)	030-FGS-SC-001 CABINET AUX.	WP	230VAC	11/1/2947/30	2040	3x4	3E	25

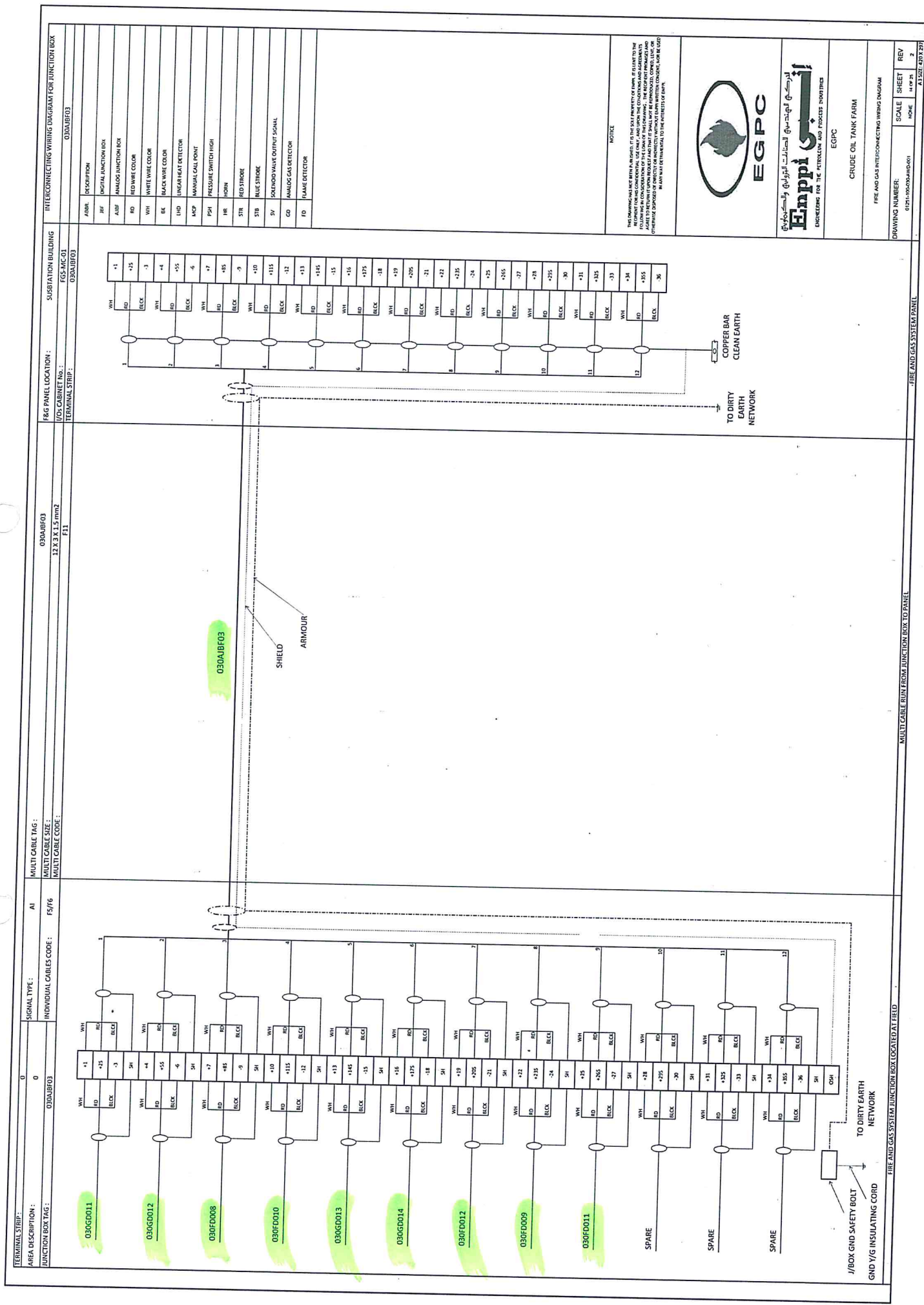












ADDR	DESCRIPTION
JIF	DIGITAL JUNCTION BOX
ABF	ANALOG JUNCTION BOX
RD	RED WIRE COLOR
WH	WHITE WIRE COLOR
BLK	BLACK WIRE COLOR
LHD	LINEAR HEAT DETECTOR
MCP	MANUAL CALL POINT
PSH	PRESSURE SWITCH HIGH
HR	HORN
STR	RED STROBE
STB	BLUE STROBE
SV	SOLENOID VALVE OUTLET SIGNAL
GD	ANALOG GAS DETECTOR
FD	FLAME DETECTOR

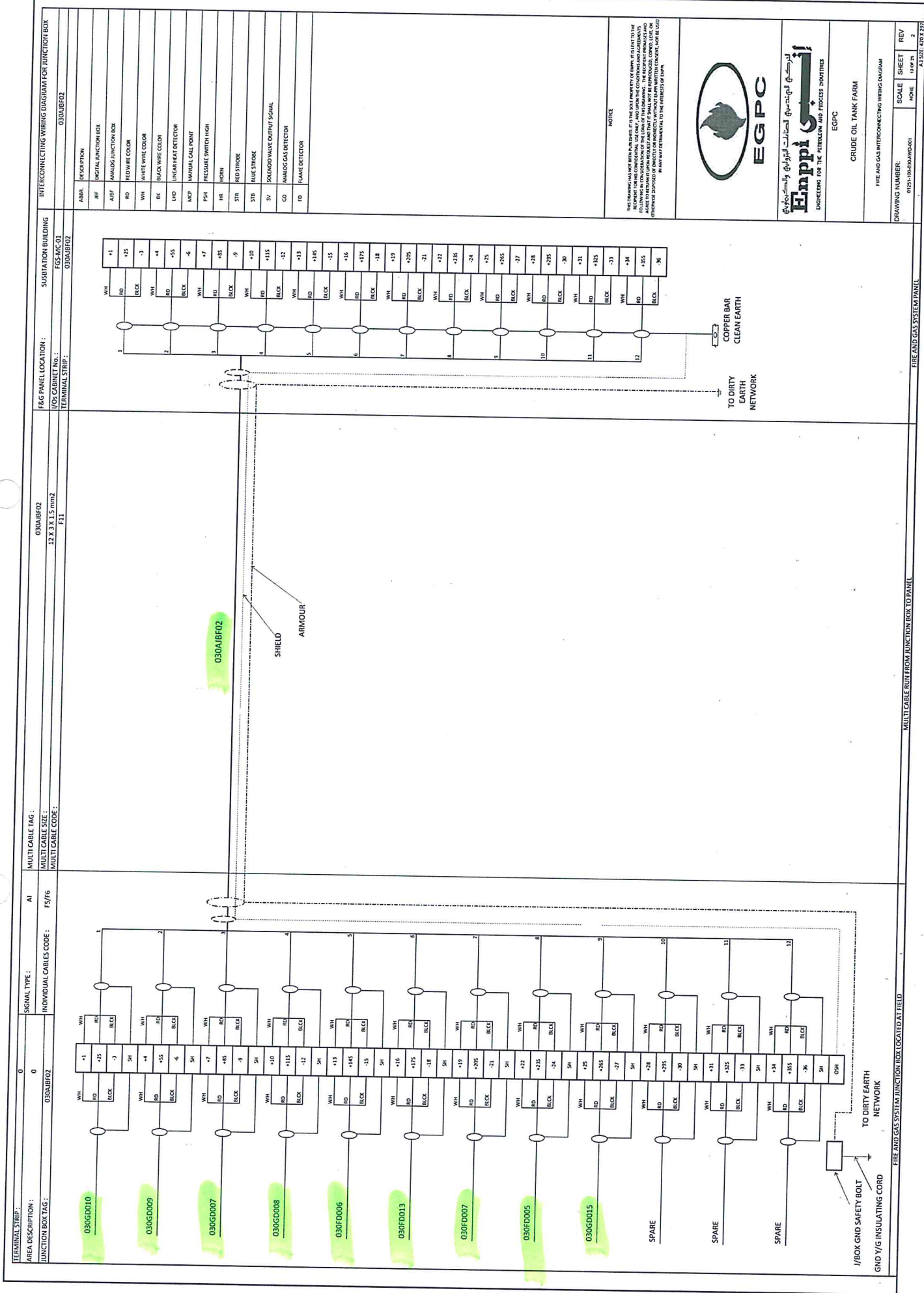
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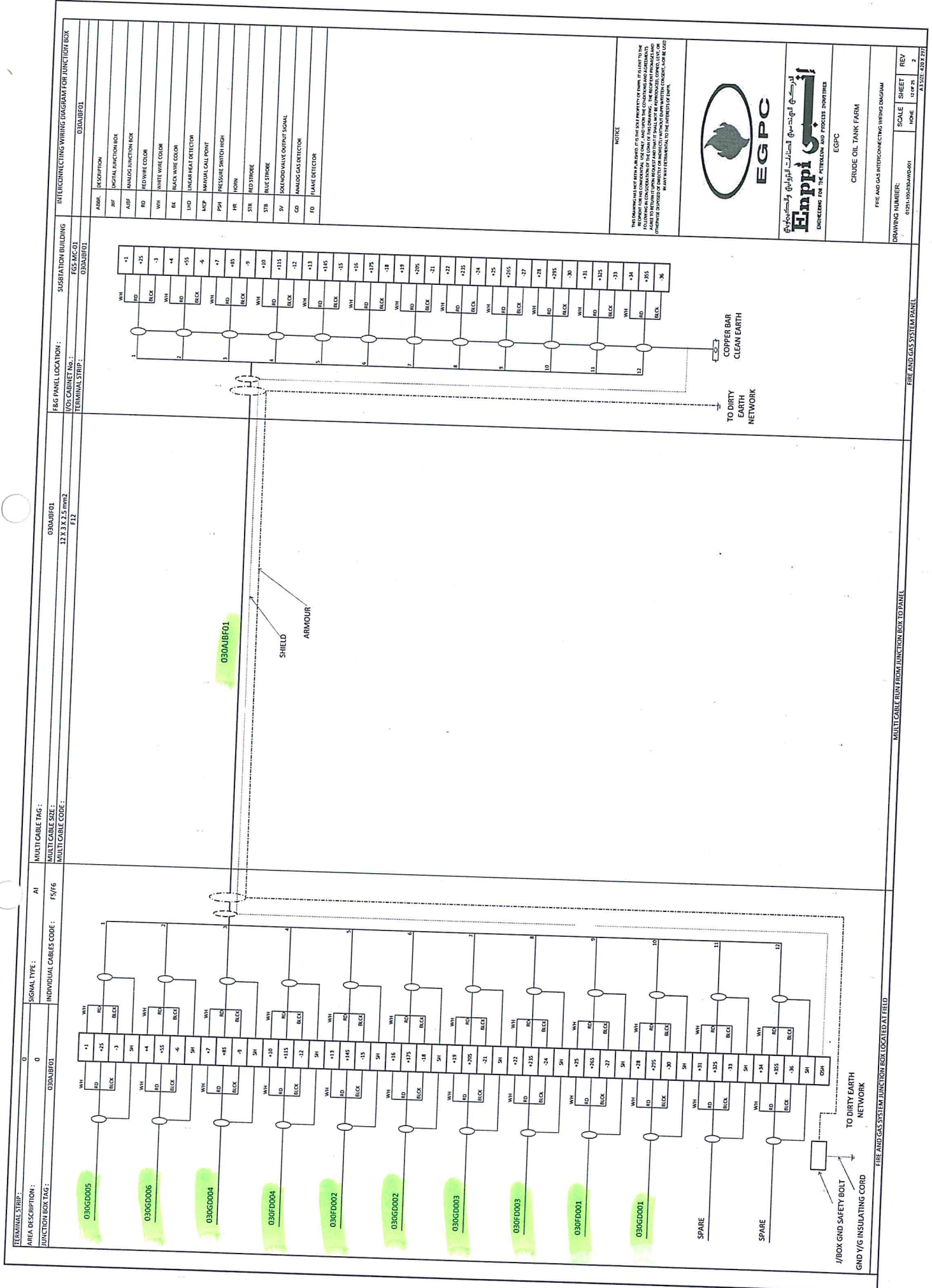
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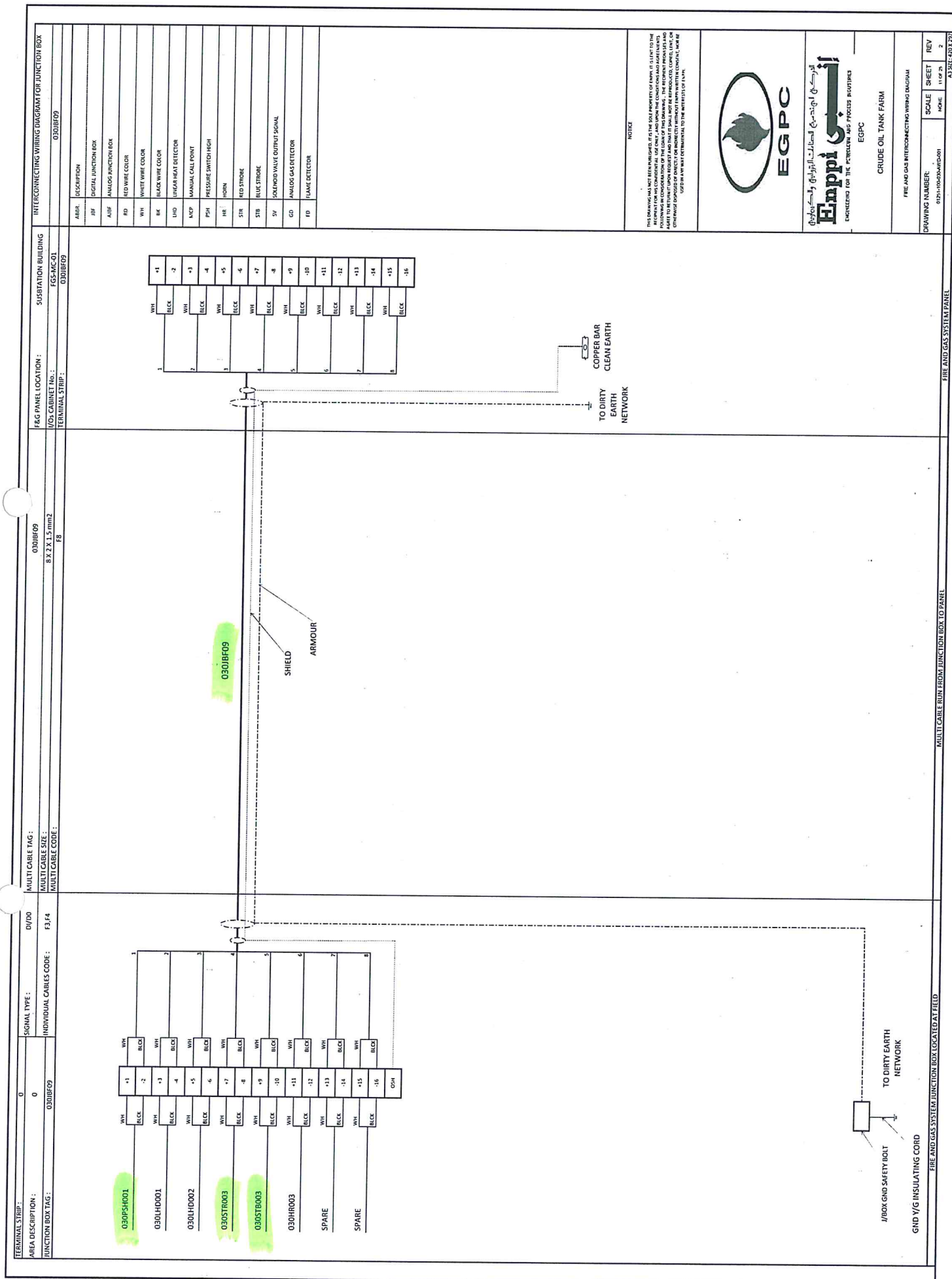
Enppi  
ENGINEERING FOR THE PETROLEUM AND PROCESS INDUSTRIES

EGPC
CRUDE OIL TANK FARM
FIRE AND GAS INTERCONNECTING WIRING DIAGRAM
DRAWING NUMBER: 0124-1000-AND-001
SCALE: NONE
SHEET: 14 OF 21
REV: 2
A3 SIZE: 420 X 297

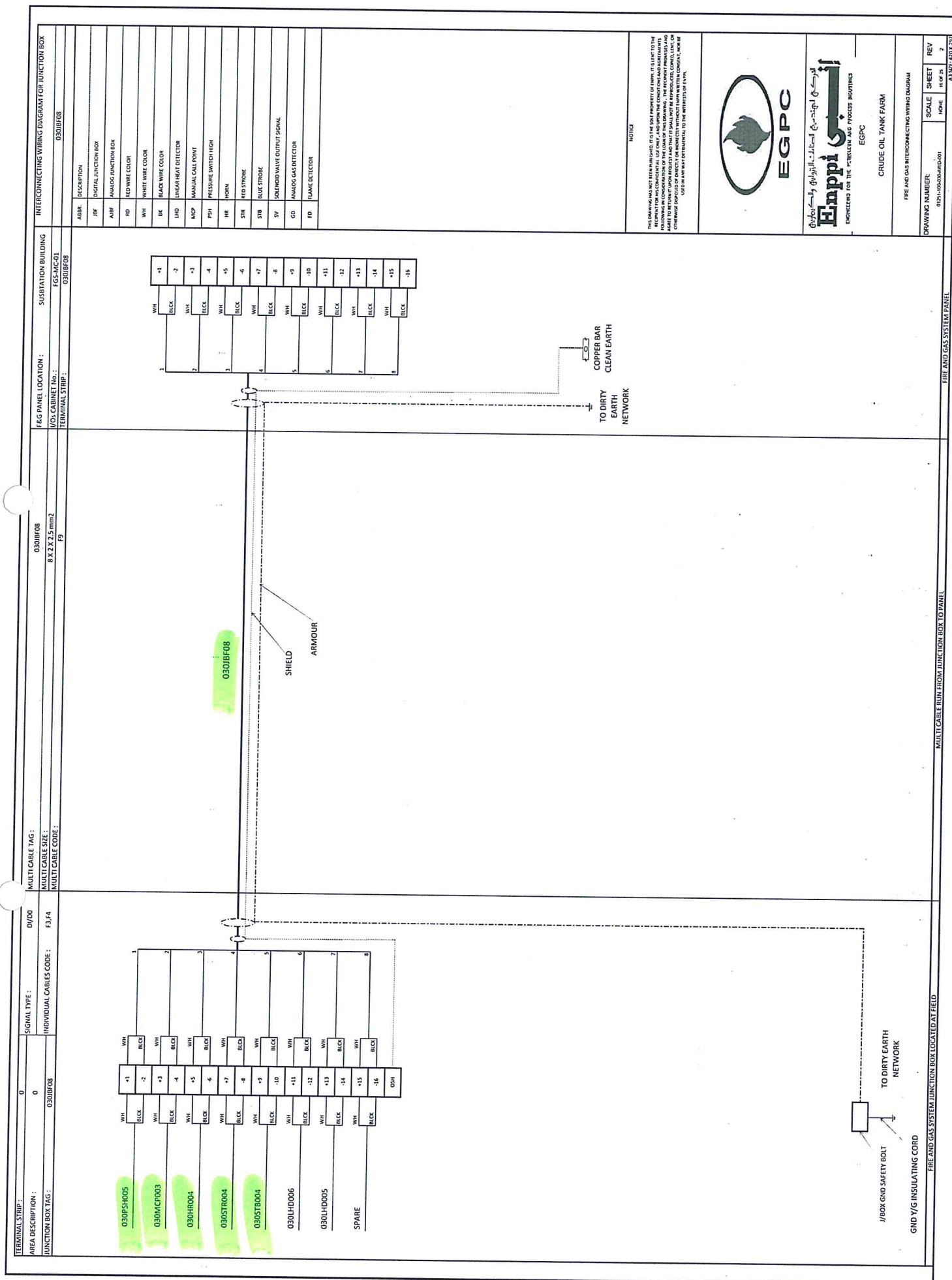


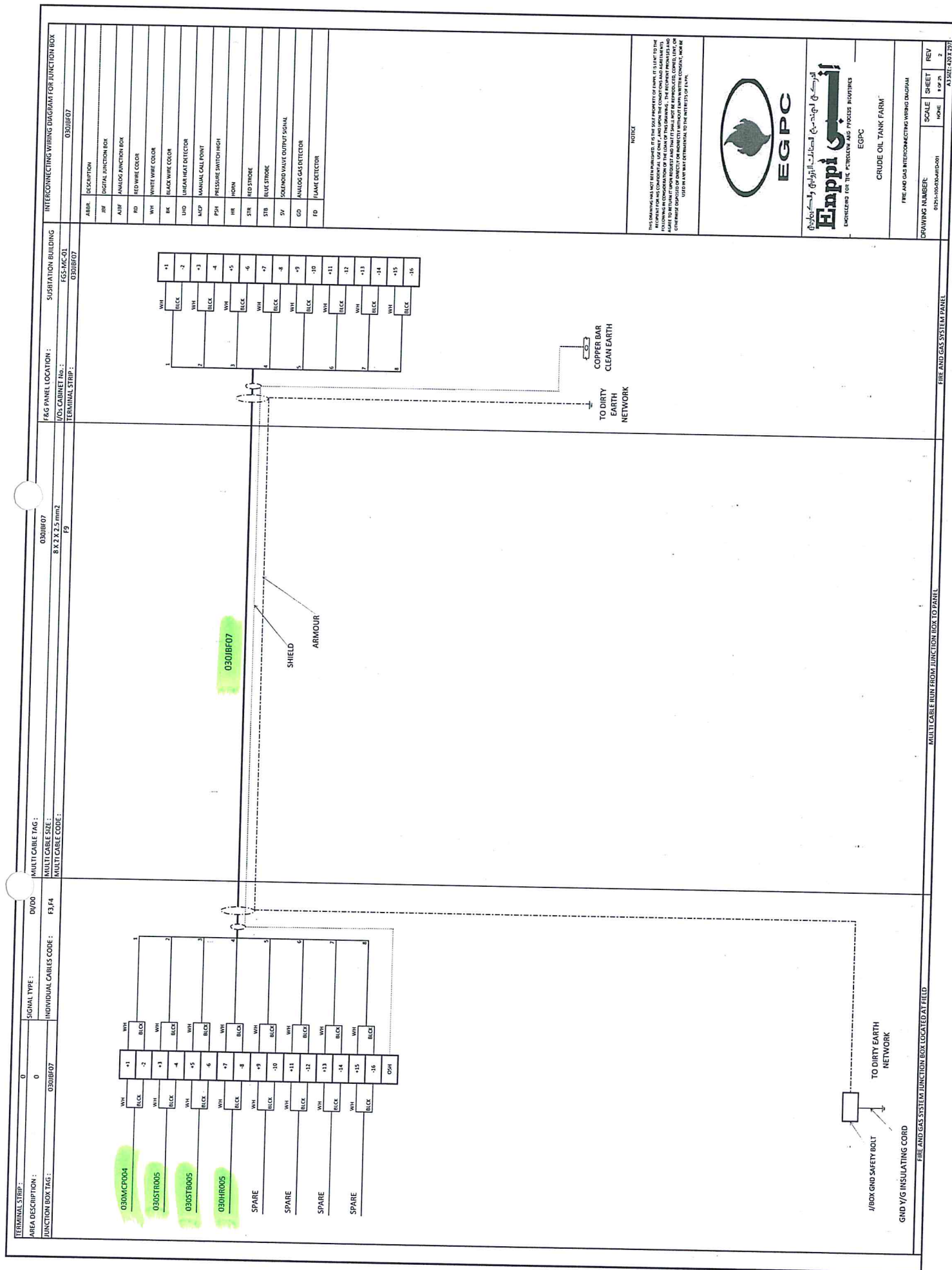


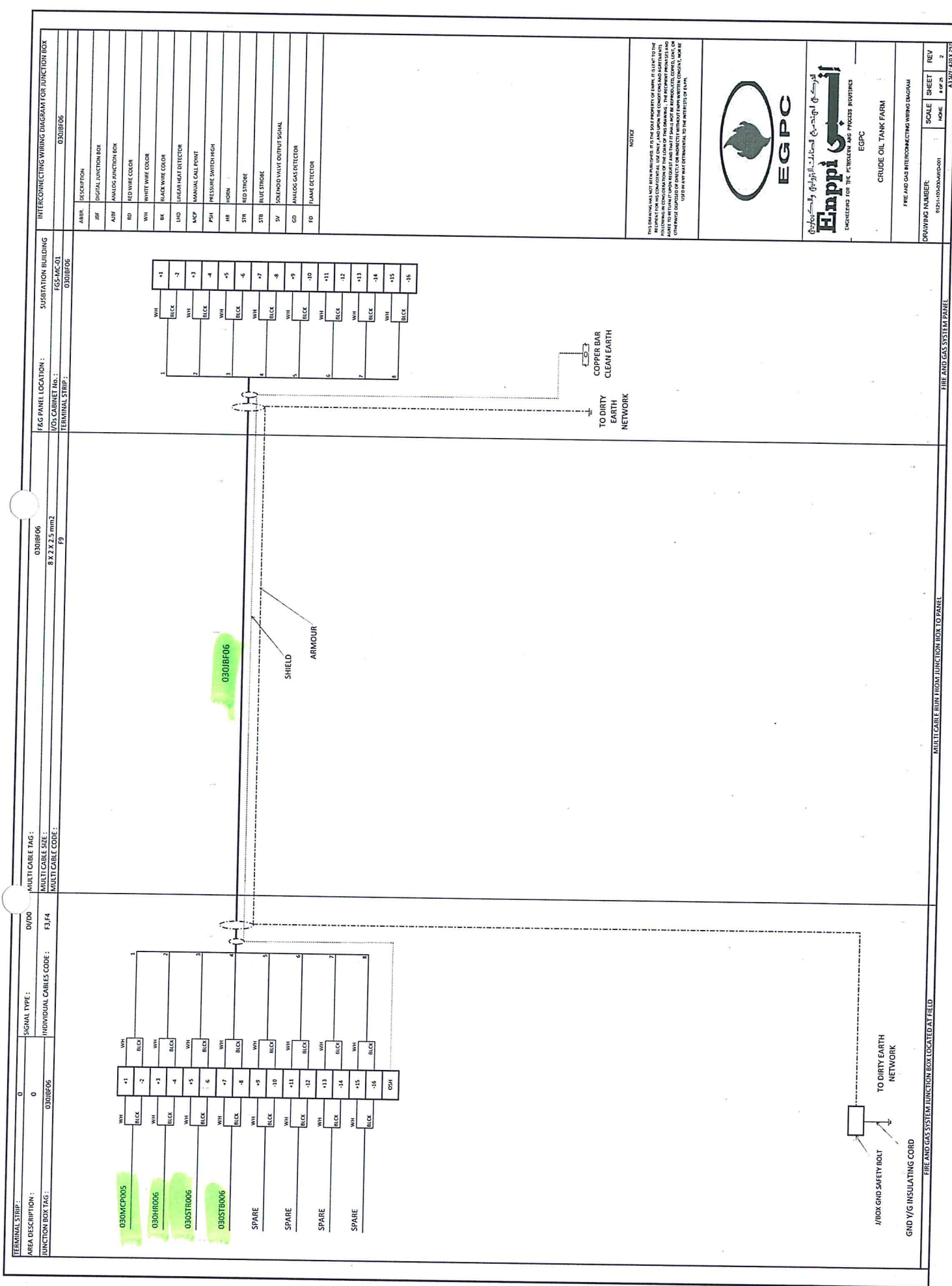












NOTICE

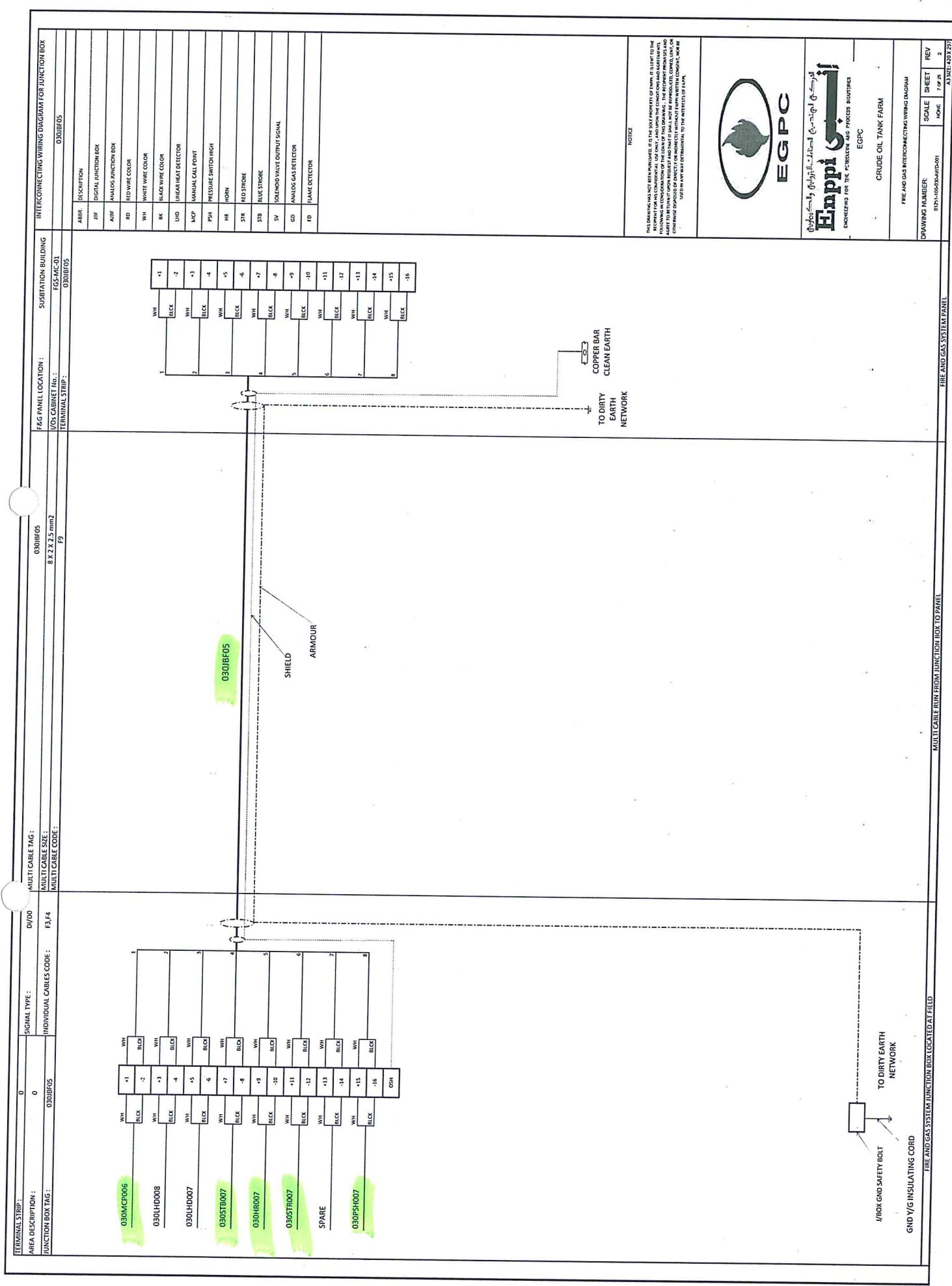
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EGPC  
ENGINEERING FOR THE PETROLEUM AND PROCESS INDUSTRIES

CRUDE OIL TANK FARM

DRAWING NUMBER:	0191-10030000001	SCALE:	SHEET	REV
			4 of 5	2



INTERCONNECTING WIRING DIAGRAM FOR JUNCTION BOX			
TERMINAL STRIP :	SIGNAL TYPE :	D/DO	030BF05
AREA DESCRIPTION :	0		
JUNCTION BOX TAG :	030BF05		
MULTI CABLE TAG :			
MULTI CABLE SIZE :			
MULTI CABLE CODE :			
F&G PANEL LOCATION :			
SUBSTATION BUILDING :			
UGS CABINET No. :			
TERMINAL STRIP :			
030BF05			
ABBA	DESCRIPTION		
JIF	DIGITAL JUNCTION BOX		
AJIF	ANALOG JUNCTION BOX		
RD	RED WIRE COLOR		
WH	WHITE WIRE COLOR		
BLK	BLACK WIRE COLOR		
UHD	ULTRAHIGH DETECTOR		
ANCP	MANUAL CALL POINT		
PSH	PRESSURE SWITCH HIGH		
HR	HORN		
STR	RED STROKE		
SV	SOLENOID VALVE OUTPUT SIGNAL		
GD	ANALOG GAS DETECTOR		
FD	FLAME DETECTOR		

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ENGINEERING FOR THE PETROLEUM AND PROCESS INDUSTRIES

CRUDE OIL TANK FARM

EGPC

DRAWING NUMBER	SCALE	SHEET	REV
012H110003-AMT-001	NONE	2 OF 2	2

FIRE AND GAS SYSTEM PANEL

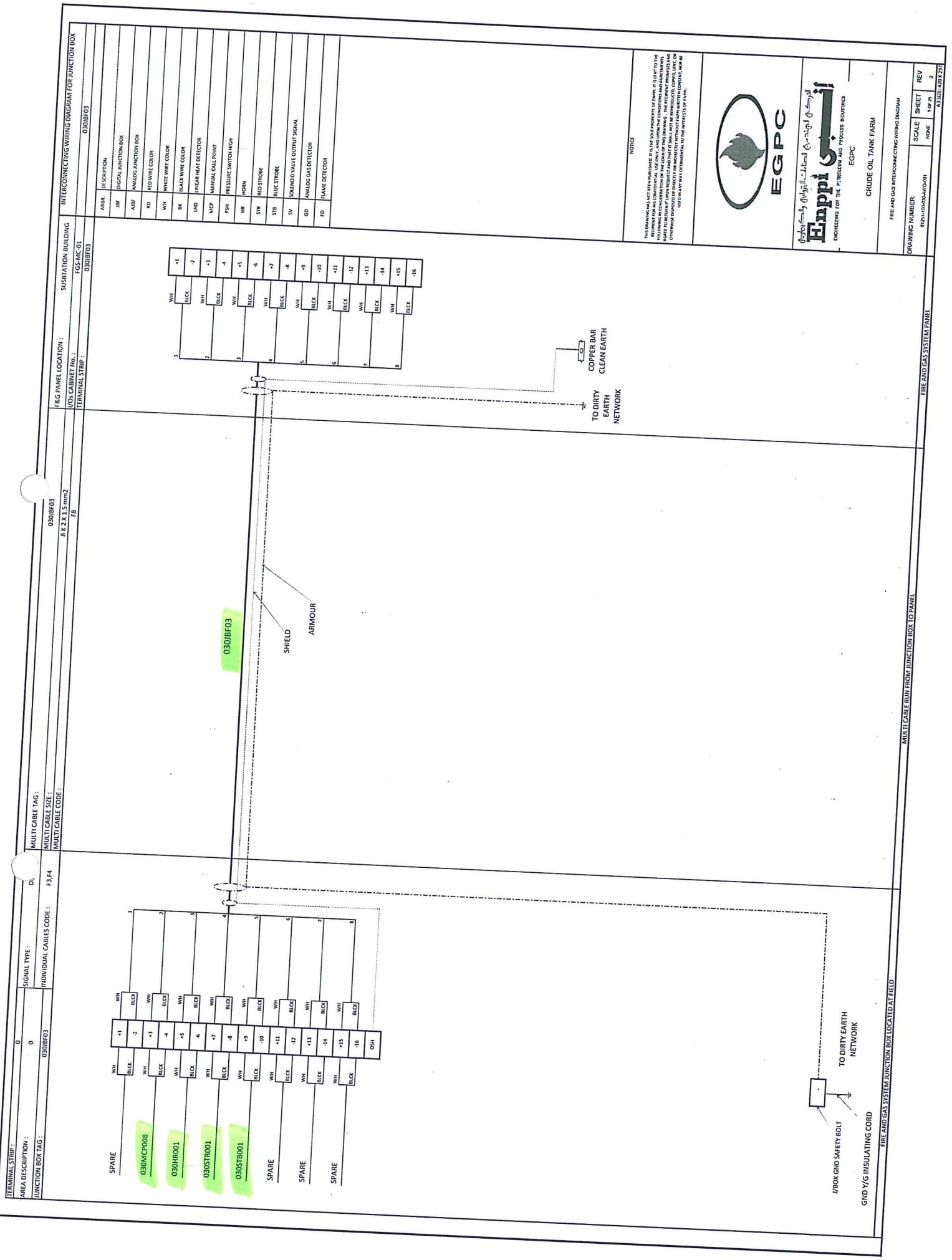
MULTI CABLE RUN FROM JUNCTION BOX TO PANEL

FIRE AND GAS SYSTEM JUNCTION BOX LOCATED AT FIELD







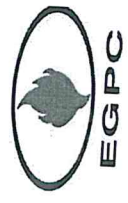


TERMINAL STRIP :	0	SIGNAL TYPE :	DL	MULTI CABLE TAG :	030BF03	8 X 2 X 1.5 mm <sup>2</sup>	FB	030BF03
AREA DESCRIPTION :	0	INDIVIDUAL CABLES CODE :	P3,F4	MULTI CABLE SIZE :	030BF03	8 X 2 X 1.5 mm <sup>2</sup>	FB	030BF03
JUNCTION BOX TAG :	030BF03			MULTI CABLE CODE :	030BF03			030BF03

AREA	DESCRIPTION
IBF	DIGITAL JUNCTION BOX
ABF	ANALOG JUNCTION BOX
RD	RED WIRE COLOR
WH	WHITE WIRE COLOR
BL	BLACK WIRE COLOR
UD	UNIGAR HEAT DETECTOR
MDP	MANUAL CALL POINT
PSH	PRESSURE SWITCH HIGH
HR	HORN
STR	RED STROBE
STR	BLUE STROBE
SV	SOLAR VALVE OUTPUT SIGNAL
GD	ANALOG GAS DETECTOR
FD	FLAME DETECTOR

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ENGINEERING FOR THE PETROLEUM AND PROCESS INDUSTRIES

CRUDE OIL TANK FARM

EGPC

DRAWING NUMBER: 0125-110325W0001

SCALE: NONE

SHEET: 1 OF 1

REV: 2

INTERCONNECTING WIRING DIAGRAM FOR JUNCTION BOX

030BF03

TO DIRTY EARTH NETWORK

COPPER BAR

CLEAN EARTH

SHIELD

ARMOUR

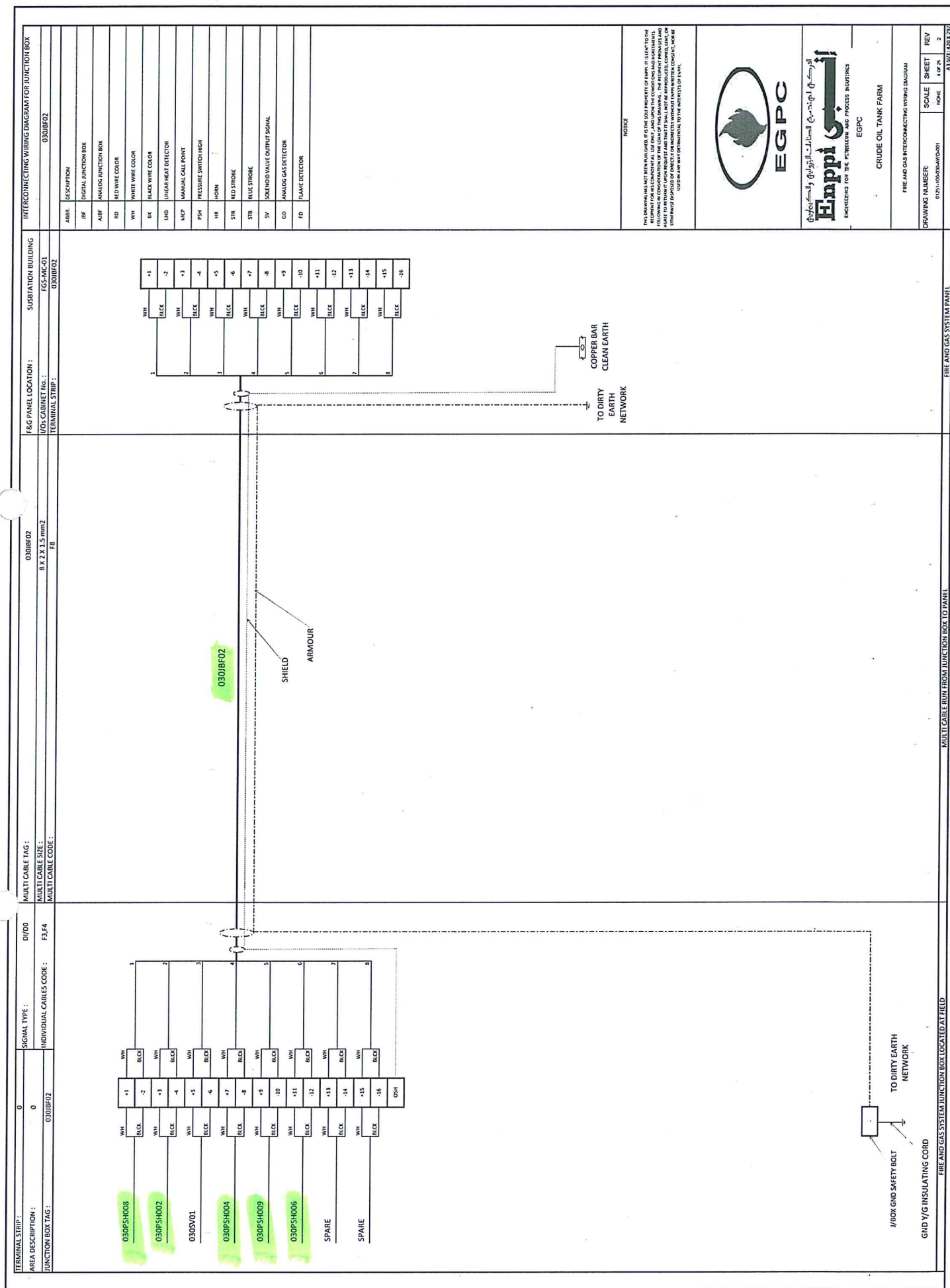
TO DIRTY EARTH NETWORK

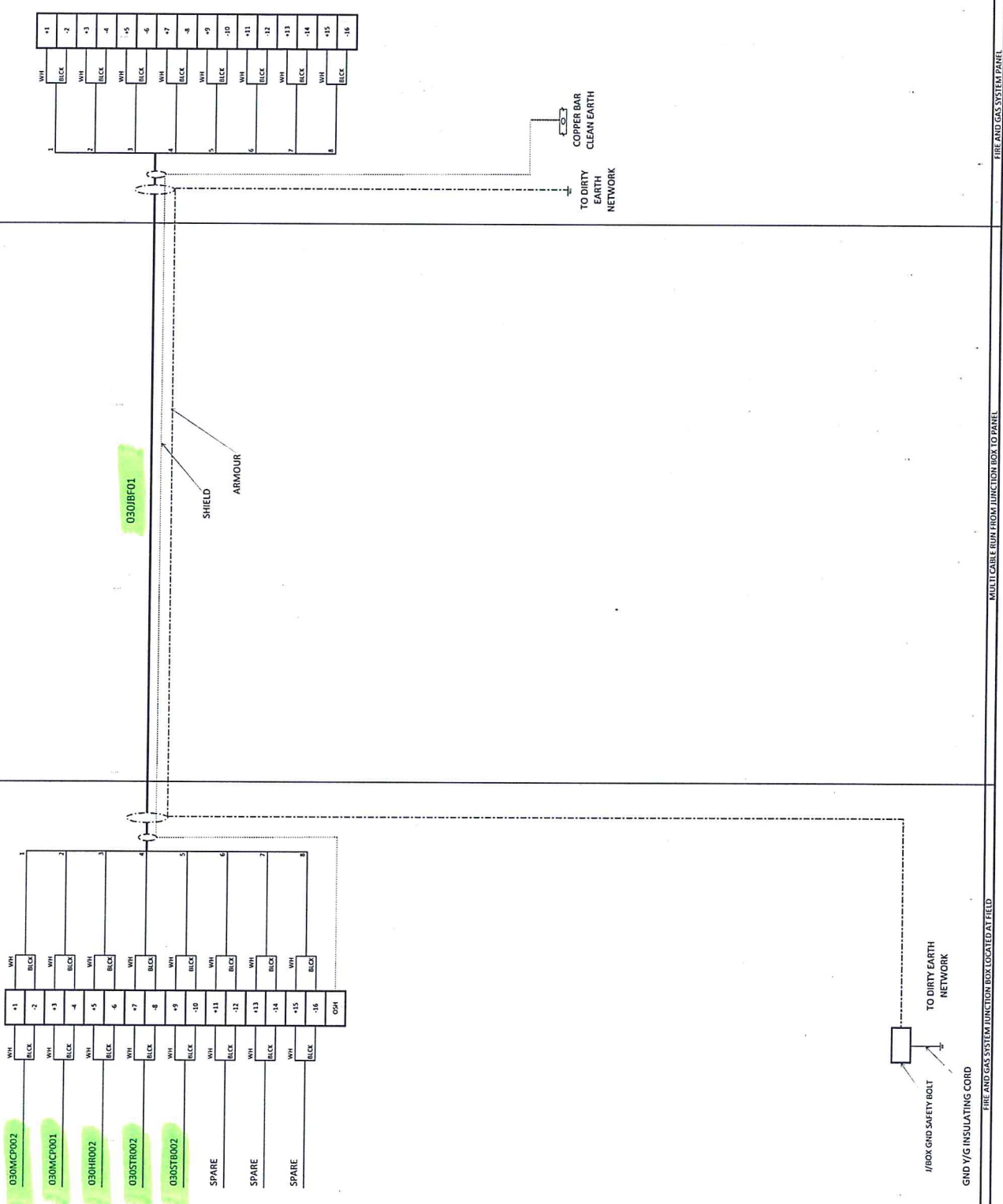
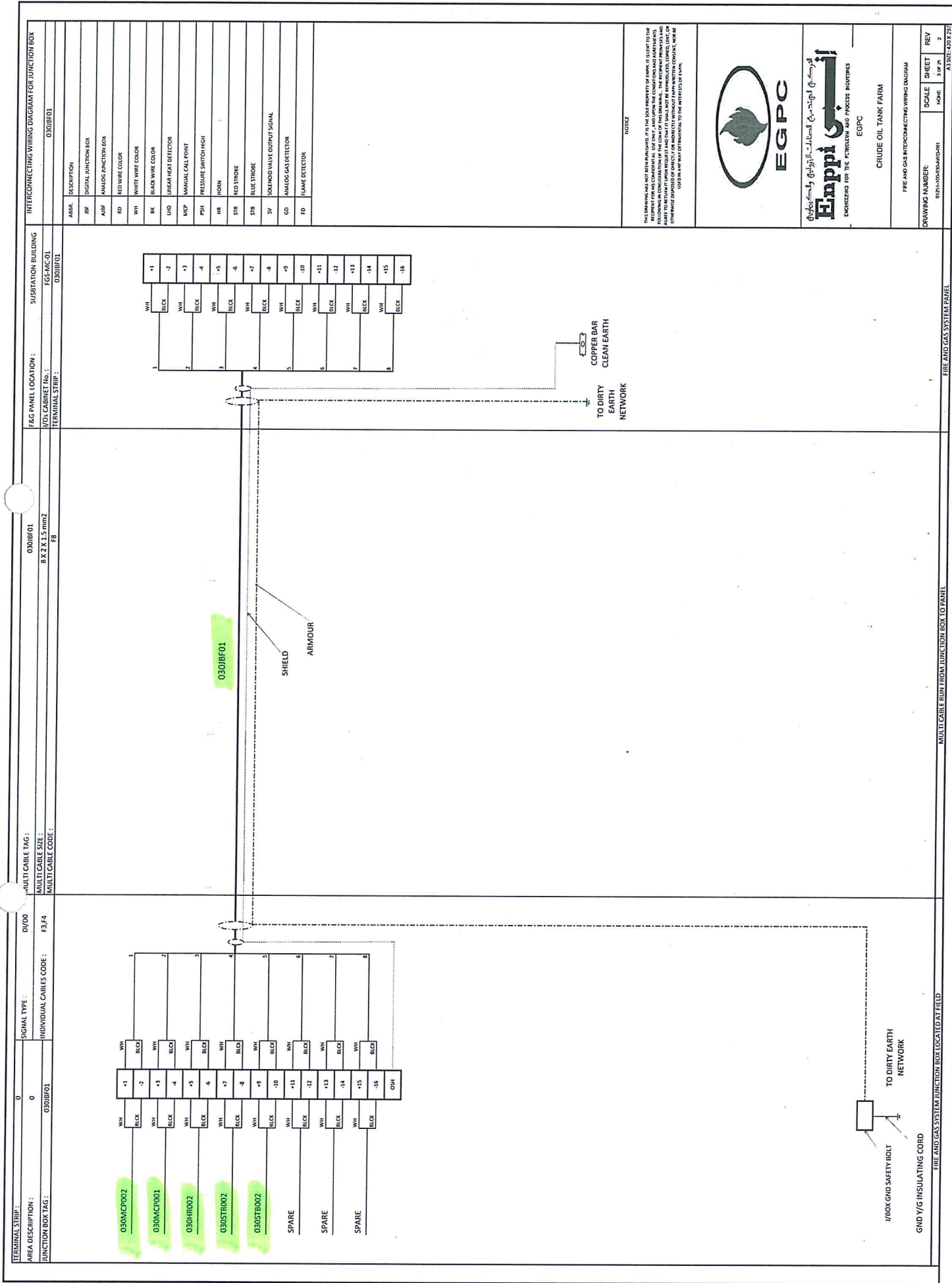
GND Y/G INSULATING CORD

J/BOX GND SAFETY BOLT

MULTI CABLE RUN FROM JUNCTION BOX TO PANEL

FIRE AND GAS SYSTEM JUNCTION BOX LOCATED AT FIELD







Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 12.05- Electrical Cables Laying Certificates











Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 12.06- Electrical Cables Testing Certificates





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EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

### CABLE INSULATION RESISTANCE TEST

INSPECTION REPORT NUMBER

PTJ-ELE-RFI-

INSTRUMENT TYPE:

HIGH VOLTAGE INSULATION TESTER-SANWA-MG5000

INSPECTION DATE & TIME

10/04/2021

DOCUMENT No

ITR-EL-0006A

DISCIPLINE

ELECTRICAL

SYSTEM NO.:

SHEET NO

AREA / PACKAGE:

SUBSTATION

TEST VOLTAGE: 1000

SERVICE VOLTAGE: 400

SERIAL:

17015900385

NO	Item/Tag NO.	CABLE SIZE	Continuity Test	PHASE TO PHASE			PHASE TO NEUTRAL "M.Ohm"			PHASES & NEUTRAL TO ARMOR "M.Ohm"			SUBSTANTION	
				BR-BK	BR-GR	BK-GR	BR-B	BK-B	GR-B	BR-ARM	BK-ARM	GR-ARM	B-ARM	Pass
17	P1-030-FGS-SC-001	3x4	✓	0.1										✓
18	P2-030-FGS-SC-001	3x4	✓	0.1										✓
19	P1-030-TGS-001	3x4	✓	0.1										✓
20	P2-030-TGS-001	3x4	✓	0.1										✓
21	P3-030-PLC-SC-001	3x4	✓	0.1										✓
22	P3-030-PLC-SC-002	3x4	✓	0.1										✓
23	P3-030-PLC-SC-003	3x4	✓	0.1										✓
24	P3-030-PLC-SC-004	3x4	✓	0.1										✓
25	P3-030-TGS-001	3x4	✓	0.1										✓
26	P3-030-FGS-SC-001	3x4	✓	0.1										✓
27	M-030-PM-04A	3x10	✓	0.1										✓
28	M-030-PM-04B	3x10	✓	0.1										✓
29	M-030-PM-05A	3x10	✓	0.1										✓
30	M-030-PM-05B	3x10	✓	0.1										✓
31	P-030-P-16A	3.5x70	✓	0.1										✓
32	P-030-P-16B	3.5x70	✓	0.1										✓
Remarks :														

Remarks :-

Reference :-

PETROJET

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ITR-EL-0006A



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EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

### CABLE INSULATION RESISTANCE TEST

SYSTEM NO.:

INSPECTION REPORT NUMBER

R/F:

INSPECTION DATE & TIME

DOCUMENT No.  
ITR-EL-0006A

DISCIPLINE  
ELECTRICAL

SHEET NO

INSTRUMENT TYPE:

SERIAL:

SERVICE VOLTAGE:

220 v

TEST VOLTAGE:


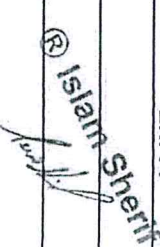
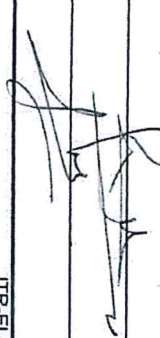
1kv

AREA / PACKAGE:

N	Item/Tag NO.	CABLE SIZE	Continuity Test	PHASE TO PHASE "M.Ohm"			PHASE TO NEUTRAL "M.Ohm"			PHASES & NEUTRAL TO ARMOR "M.Ohm"			RESULT	
				BR-BK	BR-GR	BK-GR	BR-B	BK-B	GR-B	BR-ARM	BK-ARM	GR-ARM	B-ARM	Pass
1	030-GD-005	1*3*1.5	✓											✓
2	030-GD-006	1*3*1.5												
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
Remarks :														

Remarks :-

Reference :-

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-0006A





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EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE INSULATION RESISTANCE TEST

INSPECTION REPORT NUMBER

RFI-177

INSPECTION DATE & TIME

DOCUMENT No.

ITR-EL-0006A

DISCIPLINE

ELECTRICAL

SYSTEM NO.:

SHEET NO

INSTRUMENT TYPE:

SERIAL:

SERVICE VOLTAGE:

220 V

TEST VOLTAGE:

1kv

AREA / PACKAGE:

N O	Item/Tag NO.	CABLE SIZE	Continuity Test	PHASE TO PHASE "M.Ohm"			PHASE TO NEUTRAL "M.Ohm"			PHASES & NEUTRAL TO ARMOR "M.Ohm"			RESULT
				BR-BK	BR-GR	BK-GR	BR-B	BK-B	GR-B	BR-ARM	BK-ARM	GR-ARM	
1	030-FD-005	1*3*1.5	✓										Pass
2	030-FD-007	1*3*1.5	✓										✓
3	030-FD-008	1*3*1.5	✓										✓
4	030-FD-009	1*3*1.5	✓										✓
5	030-FD-010	1*3*1.5	✓										✓
6	030-FD-011	1*3*1.5	✓										✓
7	030-FD-012	1*3*1.5	✓										✓
8	030-FD-013	1*3*1.5	✓										✓
9	030-GD-007	1*3*1.5	✓										✓
10	030-GD-008	1*3*1.5	✓										✓
11	030-GD-009	1*3*1.5	✓										✓
12	030-GD-010	1*3*1.5	✓										✓
13	030-GD-011	1*3*1.5	✓										✓
14	030-GD-012	1*3*1.5	✓										✓
15	030-GD-013	1*3*1.5	✓										✓
16	030-GD-014	1*3*1.5	✓										✓
17	030-GD-015	1*3*1.5	✓										✓
18	030-PSH-009	1*2*1.5	✓										✓
19	030-PSH-010	1*2*1.5	✓										✓
20	030-SV-001	1*2*1.5	✓										✓
21	030-SV-002	1*2*1.5	✓										✓

Remarks :- 030-AJPF-002 12\*3\*2.5 ✓  
030-AJPF-003 12\*3\*2.5 ✓  
030-FD-006 1\*3\*1.5 ✓

Reference :-

PETROJET		ENPPI		PMC	
NAME :					
SIGNATURE					





Enppi

PTJ/NET

EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE INSULATION RESISTANCE TEST

INSPECTION REPORT NUMBER

PTJ-INST-RFI-81

INSTRUMENT TYPE:

FLUKE 1507 INSULATION TESTER

SERIAL:

46240215WS

INSPECTION DATE & TIME

SERVICE VOLTAGE:

24

DOCUMENT No.

ITR-EL-0006B

DISCIPLINE

INST

SYSTEM NO.:

SHEET NO

TEST VOLTAGE:

250

AREA / PACKAGE:

NO	Item/Tag NO.	CABLE SIZE	Continuity Test	pair conductors	conductors to armor	Shield to Shield	All Conductors-GND	Overall Shield-GND	Armor-GND	RESULT
18	030-STB-001	1X2X2.5	✓							Pass ✓
19	030-STR-001	1X2X2.5	✓							Pass ✓
20	030-HR-001	1X2X2.5	✓							Pass ✓
21	030-MCP-008	1X2X1.5	✓							Pass ✓
22	030-LHD-008	1X2X1.5	✓							Pass ✓
23	030-LHD-008	1X2X1.5	✓							Pass ✓
24	030-LHD-008	8X2X2.5	✓							Pass ✓
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										

Remarks :-

Reference :-

NAME :	PETROJET	ENPP	PMC
SIGNATURE			
DATE			

ITR-EL-0006B



Enppi

PETROJET

EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE INSULATION RESISTANCE TEST

INSPECTION REPORT NUMBER  
PTJ-INST-RFI-80

INSPECTION DATE & TIME

DOCUMENT No.  
ITR-EL-0006B

DISCIPLINE  
INST

SYSTEM NO.:

SHEET NO

INSTRUMENT TYPE:  
FLUKE 1507 INSULATION TESTER

SERIAL:  
46240215WS

SERVICE VOLTAGE:  
24

TEST VOLTAGE:  
250

AREA / PACKAGE:

NO	Item/Tag NO.	CABLE SIZE	Continuity Test	pair conductors	conductors to armor	Shield to Shield	All Conductors-GND	Overall Shield -GND	RESULT	
									Armor-GND	Pass FAIL
1	030-STR-002	1X2X2.5	✓	25-0				2270 MΩ		✓
2	030-STB-002	1X2X2.5	✓							✓
3	030-HR-002	1X2X2.5	✓							✓
4	030-PSH-001 A	1X2X2.5	✓							✓
5	030-PSH-001 B	1X2X2.5	✓							✓
6	030-PSH-001 C	1X2X2.5	✓							✓
7	030-PSH-001 D	1X2X2.5	✓							✓
8	030-PSH-003 A	1X2X2.5	✓							✓
9	030-PSH-003 B	1X2X2.5	✓							✓
10	030-PSH-003 C	1X2X2.5	✓							✓
11	030-PSH-003 D	1X2X2.5	✓							✓
12	030-PSH-007 A	1X2X2.5	✓							✓
13	030-PSH-007 B	1X2X2.5	✓							✓
14	030-PSH-007 C	1X2X2.5	✓							✓
15	030-PSH-007 D	1X2X2.5	✓	25-0				2270 MΩ		✓
16										
17										

Remarks :-

Reference

	PETROJET	ENPPI	PMC
NAME :		Islam Sherif	
SIGNATURE			
DATE			

ITR-EL-0006B





Enppi

EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE INSULATION RESISTANCE TEST

INSPECTION REPORT NUMBER

RFL-177

INSTRUMENT TYPE:

SERIAL:

INSPECTION DATE & TIME

DOCUMENT No.

ITR-EL-0006A

DISCIPLINE

ELECTRICAL

SYSTEM NO.:

SHEET NO

AREA / PACKAGE:

SERVICE VOLTAGE:

220 v


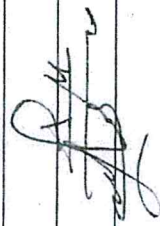
TEST VOLTAGE:

1kv

N O	Item/Tag NO.	CABLE SIZE	Continuity Test	PHASE TO PHASE "M.Ohm"			PHASE TO NUETRAL "M.Ohm"			PHASES & NUETRAL TO ARMOR "M.Ohm"			RESULT			
				BR-BK	BR-GR	BK-GR	BR-B	BK-B	GR-B	BR-ARM	BK-ARM	GR-ARM	B-ARM	Pass	FAIL	
1	030-PSH-002	1*2*1.5	✓	}										✓		
2	030-PSH-004	1*2*1.5	✓												✓	
3	030-PSH-006	1*2*1.5	✓												✓	
4	030-PSH-008	1*2*1.5	✓												✓	
5	030-MCP-001	1*2*1.5	✓												✓	
6	030-JBI-002	8*2*1.5	✓	}										✓		
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																

Remarks :-

Reference :-

PETROJET		ENPPI		PMC	
NAME :					
SIGNATURE					
DATE					

ITR-EL-0006A



Enppi

EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE INSULATION RESISTANCE TEST

INSPECTION REPORT NUMBER

RFI-177

INSTRUMENT TYPE:

INSPECTION DATE & TIME

DOCUMENT NO.  
ITR-EL-0006A

SYSTEM NO.:

SHEET NO

DISCIPLINE  
ELECTRICAL

SERVICE VOLTAGE:  
22kV

TEST VOLTAGE:  
250V

AREA / PACKAGE:

N O	Item/Tag NO.	CABLE SIZE	Continuity Test	PHASE TO PHASE "M.Ohm"			PHASE TO NEUTRAL "M.Ohm"			PHASES & NEUTRAL TO ARMOR "M.Ohm"			RESULT
				BR-BK	BR-GR	BK-GR	BR-B	BK-B	GR-B	BR-ARM	BK-ARM	GR-ARM	Pass
1	030-FD-003	1x3x2.5	✓	250V			250V			270 HR			✓
2	030-ASBF-001	12x3x2.5	✓										✓
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													

Remarks :-

Reference :-

PETROJET		ENPP		PMC	
NAME					
SIGNATURE					
DATE					

ITR-EL-0006A





Enppi

PETROJET

EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE INSULATION RESISTANCE TEST

INSPECTION REPORT NUMBER

PTJ-INST-REF-0 63

INSTRUMENT TYPE:

FLUKE 1507 INSULATION TESTER

SERIAL:

46240215WS

SERVICE VOLTAGE:

24

TEST VOLTAGE:

500

SYSTEM NO.:

SHEET NO

DISCIPLINE

DOCUMENT No.

ITR-EL-0006B


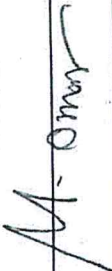
INST

AREA / PACKAGE:

NO	Item/Tag NO.	CABLE SIZE	Continuity Test	pair conductors	conductors to armor	Shield to Shield	All Conductors-GND	Overall Shield -GND	Armor-GND	RESULT
										Pass FAIL
1	030-JBF-006	8X2X2.5	✓	G.L	✓	✓	✓	✓	✓	✓
2	030-JBF-007	8X2X2.5	✓	O.L	✓	✓	✓	✓	✓	✓
3	030-LHD-005	1X2X1.5	✓	O.L	✓	✓	✓	✓	✓	✓
4	030-LHD-006	1X2X1.5	✓	O.L	✓	✓	✓	✓	✓	✓
5	030-PSH-005 A	1X2X1.5	✓	O.L	✓	✓	✓	✓	✓	✓
6	030-PSH-005 B	1X2X1.5	✓	O.L	✓	✓	✓	✓	✓	✓
7	030-PSH-005 C	1X2X1.5	✓	G.L	✓	✓	✓	✓	✓	✓
8	030-PSH-005 D	1X2X1.5	✓	O.L	✓	✓	✓	✓	✓	✓
9	030-GD-003	1X3X1.5	Hold							
10	030-FD-003	1X3X1.5	Hold							
11										
12										
13										
14										
15										
16										
17										

Remarks :-

Reference

PETROJET		ENPPI		PMC	
NAME :					
SIGNATURE					
DATE					

ITR-EL-0006B



EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

### CABLE INSULATION RESISTANCE TEST

INSPECTION REPORT NUMBER

REF: 54

INSTRUMENT TYPE:

INSPECTION DATE & TIME

DOCUMENT No:  
ITR-EL-0006A

SYSTEM NO.:

SHEET NO

DISPLINE  
ELECTRICAL

AREA / PACKAGE:

SERVICE VOLTAGE:  
220 V

TEST VOLTAGE:  
1kv

SERIAL:

N O	Item/Tag NO.	CABLE SIZE	Continuity Test	PAIR TO PAIR RESISTANCE			PHASE TO NEUTRAL "M.Ohm"			EXCESSIVE CURRENT TO GROUND			RESULT			
				BR-BK	BR-GR	BK-GR	BR-B	BK-B	GR-B	BR-ARM	BK-ARM	GR-ARM	B-ARM	Pass	FAIL	
1	030JBF09	8 X 2 X 1.5 mm2	✓												✓	
2	030STR003	1 X 2 X 2.5 mm2	✓												✓	
3	030STR003	1 X 2 X 2.5 mm2	✓												✓	
4	030H-R003	1 X 2 X 2.5 mm2	✓												✓	
5	030EPMF01	12 X 2 X 1.5 mm2	✓												✓	
6	030EPMF02	12 X 2 X 1.5 mm2	✓												✓	
7	030EPMF03	12 X 2 X 1.5 mm2	✓												✓	
8	030EPMF04	12 X 2 X 1.5 mm2	✓												✓	
9	030e-HCP-002	1 X 2 X 1.5 mm2	✓												✓	
10	030e-STB-003	1 X 2 X 1.5 mm2	✓												✓	
11	030e-HR-003	1 X 2 X 1.5 mm2	✓												✓	
12	030e-STB-004	1 X 2 X 1.5 mm2	✓												✓	
13	030e-STB-004	1 X 2 X 1.5 mm2	✓												✓	
14	030e-STB-004	1 X 2 X 1.5 mm2	✓												✓	
15	030e-STB-004	1 X 2 X 1.5 mm2	✓												✓	
16	030e-STB-004	1 X 2 X 1.5 mm2	✓												✓	
17	030e-HR-002	1 X 2 X 1.5 mm2	✓												✓	
18																

Remarks :-

Reference :-

PETROJET		ENPPY		PMC	
NAME :					
SIGNATURE	Sobh				
DATE					

ITR-EL-0006A





Enppi

EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

### CABLE INSULATION RESISTANCE TEST

INSPECTION REPORT NUMBER

REF: 154

INSTRUMENT TYPE:

INSPECTION DATE & TIME

DOCUMENT NO  
ITR-EL-0006A

SYSTEM NO.:

SHEET NO

DISCIPLINE  
ELECTRICAL

SERVICE VOLTAGE:  
220 V

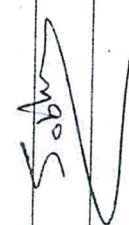

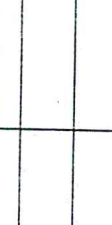
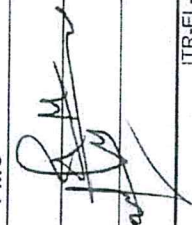
TEST VOLTAGE:  
1kv

AREA / PACKAGE:

N O	Item/Tag NO.	CABLE SIZE	Continuity Test	Phase to Phase "M.Ohm"			PHASE TO NUETRAL "M.Ohm"			QUAD & NUETRAL TO ARMOR "M.Ohm"			RESULT			
				BR-BK	BR-GR	BK-GR	BR-B	BK-B	GR-B	BR-ARM	BK-ARM	GR-ARM	B-ARM	Pass	FAIL	
1	030JBF04	8 X 2 X 1.5 mm2	✓												✓	
2	030STB008	1 X 2 X 2.5 mm2	✓												✓	
3	030HRC06	1 X 2 X 2.5 mm2	✓												✓	
4	030STR008	1 X 2 X 2.5 mm2	✓												✓	
5	030MCP007	1 X 2 X 1.5 mm2	✓												✓	
6	030JBF05	8 X 2 X 2.5 mm2	✓												✓	
7	030STR007	1 X 2 X 2.5 mm2	✓												✓	
8	030STB007	1 X 2 X 2.5 mm2	✓												✓	
9	030HRC07	1 X 2 X 2.5 mm2	✓												✓	
10	030MCP006	1 X 2 X 1.5 mm2	✓												✓	
11	030HRC06	1 X 2 X 2.5 mm2	✓												✓	
12	030STR006	1 X 2 X 2.5 mm2	✓												✓	
13	030STB006	1 X 2 X 2.5 mm2	✓												✓	
14	030MCP005	1 X 2 X 1.5 mm2	✓												✓	
15	030MCP004	1 X 2 X 1.5 mm2	✓												✓	
16	030JBF08	8 X 2 X 2.5 mm2	✓												✓	
17	030HRC04	1 X 2 X 2.5 mm2	✓												✓	
18	030MCP003	1 X 2 X 1.5 mm2	✓												✓	

Remarks :-

Reference :-

PETROJET		ENPPI		PMC	
NAME					
SIGNATURE					
DATE					

ITR-EL-0006A



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 12.07- Electrical Cables Termination Certificates



**Enppi**

## EGPC CRUDE OIL TANK FARM



Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030  
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001  
Revision No. : 00**REQUEST FOR INSPECTION**

ACTIVITY : INS JB INSTALLATION

NOTIFICATION NO. : PTJ-INST-RFI- 53A DISCIPLINE : F&amp;G

DATE : 4/23/2021

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	F&G JB INSTALLATION	Field	23-Apr-21				
1	030JBF01						
2	030JBF02						
3	030JBF03						
4	030JBF04						
5	030JBF05						
6	030JBF06						
7	030JBF07						
8	030JBF08						
9	030JBF09						
10	030AJBF01						
11	030MCP001						
12	030MCP002						
13	030STR002						
14	030HR002						
15	030STB002						
16	030MCP007						
17	030STR008						
18	030HR008						
19	030STB008						
20	030MCP006						
21	030STR007						
22	030HR007						
23	030STB007						
24	030MCP005						
25	030STR006						
26	030HR006						
27	030STB006						

**NOTE:**

Inspection result : A - Approved B - Reject C - Approved with Comment

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

**Enppi**

## EGPC CRUDE OIL TANK FARM



Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030  
:01251-100-031

Contractor : CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001  
Revision No. : 00

## REQUEST FOR INSPECTION

ACTIVITY : INS INSTALLATION &amp; TERNINATION

NOTIFICATION NO. : PTJ-INST-RFI-53A DISCIPLINE : F&amp;G

DATE : 4/23/2021

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	F&G JB INSTALLATION	Field	23-Apr-21				
28	030MCP004						
29	030STR005						
30	030HR005						
31	030STB005						
32	030MCP003						
33	030STR004						
34	030HR004						
35	030STB004						
36	030STR003						
37	030HR003						
38	030STB003						
39							
40							
41							
42							

## NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

	PETROJET	ENPPI	PMC
NAME			
SIGNATURE			
DATE			

**Enppi****EGPC CRUDE OIL TANK FARM**

INSPECTION AND TEST REPORT FOR

**E&I JUNCTION BOX INSTALLATION**

INSPECTION REPORT NUMBER

INSPECTION DATE &amp; TIME

ITR NUMBER

DISPLINE

SHEET NO

RFT-53A

ITR-EL-0020

E&amp;I

1 OF 1

EQUIPMENT TAG NUMBER

AREA DESCRIPTION

AGROOD MODULE 2

NO.	Area to be inspected	RESULT		
		ACCEPT	REJECT	N/A.
1	Verify name plate details against data sheet / drawing.	✓		
2	Verify equipment IP rating is suitable for location.	✓		
3	Visually inspect equipment and ensure no external/internal damage.	✓		
4	Check equipment fixings and mountings are secure.	✓		
5	Check earthing conforms to design requirements.	✓		
6	Check mechanical operation of all pushbuttons.			✓
7	Check gaskets and seals are not damaged.			✓
8	Check all bolts are correct and that none are missing.	✓		
9	Panel doors and glad plates bonded to panels structure.			✓
10	Door locking arrangements correct.			✓
11	Access satisfactory.	✓		
12	Internal terminal strips correctly installed.	✓		
13	Location of equipment as specified in drawing.	✓		

REMARKS:

REFERENCE DOCUMENTS:

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-0010



**Enppi****EGPC CRUDE OIL TANK FARM**

INSPECTION AND TEST REPORT FOR

**INSTRUMENT INSTALLATION**

INSPECTION REPORT NUMBER

INSPECTION DATE &amp; TIME

ITR NUMBER

DISCIPLINE

SHEET NO

ITR-IC-0001

INSTRUMENT

JOB DESCRIPTION

AREA DESCRIPTION

ENGINEERING DOCUMENT NUMBER

SYSTEM NUMBER (IF APPLICABLE)

SUBCONTRACTOR/SUPPLIER

NO.	INSPECTION	RESULT		
		ACCEPT	REJECT	N/A.
1	No physical damage are found	✓		
2	Type / size / location as per drawings and vendor data sheet	✓		
3	Identification / name plate attached correctly	✓		
4	Stanchion type / mounting as per drawings	✓		
5	Welding (if required) and touch up			✓
6	Anchor bolting / Bolt tightening	✓		
7	Grouting (if required)			✓
8	Orientation / direction as per drawings	✓		
9	Accessibility	✓		
10	Assembling compartments properly installed	✓		
11	Earthing and bonding properly installed	✓		
12	Cleanliness	✓		

REMARKS:

REFERENCE DOCUMENTS:

SUBCONTRACTOR		PETROJET		ENPPI		PMC	
NAME		NAME		NAME		NAME	
SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE	
DATE		DATE		DATE		DATE	

ITR-CI-0001



**Enppi**

EGPC CRUDE OIL TANK FARM



Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030  
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001  
Revision No. : 00**REQUEST FOR INSPECTION**

ACTIVITY : CABLE TERMINATION AND SPLICING

NOTIFICATION NO. : PTJ-INS-RFI- 54 DISCIPLINE : E&amp;I

DATE : 09-05-21

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	cable termination	MODULE 1	09-May-21				
1	030JBF09 ✓						
2	030STR003 ✓						
3	030STB003 ✓						
4	030HR003 ✓						
5	030EPMF01 ✓						
6	030EPMF02 ✓						
7	030EPMF03 ✓						
8	030EPMF04 ✓						
9	030-HR-004 ✓						
10	030-STR-005 ✓						
11	030-STB-005 ✓						
12	030-HR-005 ✓						
13	030-STR-004 ✓						
14	030-STB-004 ✓						
15	030-STR-002 ✓	Hold					
16	030-STB-002 ✓	Hold					
17	030-HR-002 ✓	Hold					
18							

**NOTE:**

Inspection result : A - Approved B - Reject C - Approved with Comment

	PETROJET	ENPPI	PMC
NAME			
SIGNATURE			
DATE			

ITR-QC-0001

**Enppi**

EGPC CRUDE OIL TANK FARM



Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030  
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001  
Revision No. : 00**REQUEST FOR INSPECTION**

ACTIVITY : CABLE TERMINATION AND SPLICING

NOTIFICATION NO. : PTJ-INS-RFI- 54 DISCIPLINE : E&amp;I

DATE : 09-05-21

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	cable termination	MODULE 1	09-May-21				
1	030MCP002 ✓						
2	030JBF04 ✓						
3	030STB008 ✓						
4	030HR008 ✓						
5	030STR008 ✓						
6	030MCP007 ✓						
7	030JBF05 ✓						
8	030STR007 ✓						
9	030STB007 ✓						
10	030HR007 ✓						
11	030MCP006 ✓						
12	030HR006 ✓						
13	030STR006 ✓						
14	030STB006 ✓						
15	030MCP005 ✓						
16	030MCP004 ✓						
17	030JBF08 ✓						
18	030MCP003 ✓						

**NOTE:**

Inspection result : A - Approved B - Reject C - Approved with Comment

Stanley tags must be installed for all cables. (Done) Subh			
NAME	PETROJET	ENPPI	PMC
SIGNATURE	(Done) Subh	Ram / Subh	Subh
DATE	Subh		

ITR-QC-0001





EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

## CABLE TERMINATION AND SPLICING

INSPECTION REPORT NUMBER

Rf1-54

INSPECTION DATE &amp; TIME

ITR NUMBER

ITR-EL-0009

SYSTEM NO.:

DISPLINE

ELEC

SHEET NO

1 OF 1

Item/Tag NO.

Type :-

Core:

Size:

NO.	Description of check	RESULT		
		ACCEPT	REJECT	N/A.
1	Check cable glands are correct type and size as per cable schedule.	✓		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	✓		
3	Check cable tag is done correctly.	✓		
4	Test and confirm conductor, phase continuity.	✓		
5	Check insulation resistance test (megger) is completed *I	✓		
6	Check Hi-pot test is completed, only for MV/HV cables **			
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.	✓		✓
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications	✓		
9	Check enclosure cover is installed, no damages and no bolts are missing	✓		
10	Calibration test certificate of testing equipment to be checked.	✓		

Remarks :

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-0009






Document No: ITR-QC-0001  
Revision No. : 00

REQUEST FOR INSPECT

ACTIVITY : \_\_\_\_\_

INS INSTALLATION

DATE: 5/18/2021 DISCIPLINE: F&G

NAME :	PETROJET	(Don) <del>Sobh</del>	ENBE	PMC
SIGNATURE				
DATE				





EGPC CRUDE OIL TANK FARM  
AGROOD AREA (MODULE 1 & 2 )



INSPECTION AND TEST REPORT FOR

INSTRUMENT INSTALLATION

INSPECTION REPORT NUMBER	INSPECTION DATE & TIME	ITR NUMBER ITR-IC-0001	DISPLINE INSTRUMENT	SHEET NO
--------------------------	------------------------	---------------------------	------------------------	----------

JOB DESCRIPTION	AREA DESCRIPTION
-----------------	------------------

ENGINEERING DOCUMENT NUMBER	SYSTEM NUMBER(IF APPLICABLE)	SUBCONTRACTOR/SUPPLIER
-----------------------------	------------------------------	------------------------

ITEM / TAG NO.	TYPE
----------------	------

NO.	INSPECTION	RESULT		
		ACCEPT	REJECT	N/A.
1	No physical damage are found	✓		
2	Type / size / location as per drawings and vendor data sheet	✓		
3	Identification / name plate attached correctly		✓	
4	Stanchion type / mounting as per drawings	✓		
5	Welding (if required) and touch up		✓	
6	Anchor bolting / Bolt tightening	✓		
7	Grouting (if required)			✓
8	Orientation / direction as per drawings		✓	
9	Accessibility	✓		
10	Assembling compartments properly installed			✓
11	Earthing and bonding properly installed		✓	
12	Cleanliness	✓		

REMARKS:

REFERENCE DOCUMENTS:

SUBCONTRACTOR		PETROJET		ENPPI		PMC	
NAME		NAME		NAME		NAME	
SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE	
DATE		DATE		DATE		DATE	

ITR-CI-0001

**Enppi****EGPC CRUDE OIL TANK FARM**Owner : **Egyptian General Petroleum Corporation (EGPC)**Project No: 01251-100-030  
:01251-100-031Contractor **CONSORTIUM (ENPPI / PETROJET)**Document No: ITR-QC-0001  
Revision No. : 00**REQUEST FOR INSPECTION**ACTIVITY : **INSTRUMENT INSTALLATION**NOTIFICATION NO. : **PTJ-INS-RFI- 61** DISCIPLINE : **E&I**DATE : **5/22/2021**

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	INSTRUMENT INSTALLATION	MODULE 1	22-May-21				
1	030-GD-015						
2	030-FD-003						
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							

NOTE: 1 - Tag name to be installed / + Anthony should be installed (safety) - Orientation should be adjusted  
Inspection result : A - Approved B ~~Reject~~ C ~~Approved with Comment~~

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-QC-0001





EGPC CRUDE OIL TANK FARM  
AGROOD AREA (MODULE 1 & 2)



INSPECTION AND TEST REPORT FOR

INSTRUMENT INSTALLATION

INSPECTION REPORT NUMBER RFI-G1	INSPECTION DATE & TIME	ITR NUMBER ITR-IC-0001	DISCIPLINE INSTRUMENT	SHEET NO
------------------------------------	------------------------	---------------------------	--------------------------	----------

JOB DESCRIPTION		AREA DESCRIPTION	
ENGINEERING DOCUMENT NUMBER		SYSTEM NUMBER(IF APPLICABLE)	SUBCONTRACTOR/SUPPLIER
ITEM / TAG NO.	TYPE		

NO.	INSPECTION	RESULT		
		ACCEPT	REJECT	N/A.
1	No physical damage are found	✓		
2	Type / size / location as per drawings and vendor data sheet	✓		
3	Identification / name plate attached correctly		✓	
4	Stanchion type / mounting as per drawings	✓		
5	Welding (if required) and touch up	✓		
6	Anchor bolting / Bolt tightening	✓		
7	Grouting (if required)			✓
8	Orientation / direction as per drawings	✓	✓	
9	Accessibility	✓		
10	Assembling compartments properly installed	✓		
11	Earthing and bonding properly installed		✓	
12	Cleanliness	✓		

REMARKS:

REFERENCE DOCUMENTS:

SUBCONTRACTOR		PETROJET		ENPPI		PMC	
NAME		NAME		NAME		NAME	
SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE	
DATE		DATE		DATE		DATE	

ITR-CI-0001



Project No: 01251-100-030  
:01251-100-031

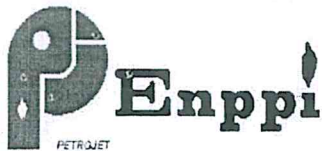
Document No: ITR-QC-0001  
Revision No. : 00

**ACTIVITY :** CABLE TERMINATION AND SPLICING

DATE : 5/25/2021

	PETROJET	ENPPI	PMC
NAME :		Islam Sherif	
SIGNATURE	Sobh	Islam Sherif	M. Omar
DATE			





## EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

## CABLE TERMINATION AND SPLICING

SYSTEM NO.:

INSPECTION REPORT NUMBER

PTJ-INST-RFI- 063

INSPECTION DATE &amp; TIME

ITR NUMBER

ITR-EL-0009

DISCIPLINE

INST

SHEET NO

1 OF 1

Item/Tag NO.

Type :-

Core:

Size:

NO.	Description of check	RESULT		
		ACCEPT	REJECT	N/A.
1	Check cable glands are correct type and size as per cable schedule.	✓		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	✓		
3	Check cable tag is done correctly.		✓	
4	Test and confirm conductor, phase continuity.	✓		
5	Check insulation resistance test (megger) is completed *I	✓		
6	Check Hi-pot test is completed, only for MV/HV cables *II			✓
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.	✓		
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications	✓		
9	Check enclosure cover is installed, no damages and no bolts are missing	✓		
10	Calibration test certificate of testing equipment to be checked.			✓

Remarks :

\*I : ITR-EL-006A/B

\*II : ITR-EL-008

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-0009

**Enppi****EGPC CRUDE OIL TANK FARM**Owner : **Egyptian General Petroleum Corporation (EGPC)**Project No: 01251-100-030  
:01251-100-031Contractor **CONSORTIUM (ENPPI / PETROJET)**Document No: ITR-QC-0001  
Revision No. : 00**REQUEST FOR INSPECTION**ACTIVITY : **INS INSTALLATION**NOTIFICATION NO. : **PTJ-INS-RFI - 064** DISCIPLINE : **E&I**DATE : **5/25/2021**

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	<b>INS INSTALLATION</b>	<b>MODULE 1</b>	<b>25-May-21</b>				
1	030-SV-001						
2	030-SV-002						
3	030-PSH-009						
4	030-PSH-010						
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**NOTE:**

Inspection result : A - Approved B - Reject C - Approved with Comment

*- tag to be install. (Done) Sobh*

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE	<i>Sobh</i>	<i>Islam Sherif</i>	<i>M. Omar</i>
DATE			

ITR-QC-0001





EGPC CRUDE OIL TANK FARM  
AGROOD AREA (MODULE 1 & 2)



INSPECTION AND TEST REPORT FOR

**INSTRUMENT INSTALLATION**

INSPECTION REPORT NUMBER

RFI-064

INSPECTION DATE & TIME

ITR NUMBER

ITR-IC-0001

DISCIPLINE

INSTRUMENT

SHEET NO

JOB DESCRIPTION

AREA DESCRIPTION

ENGINEERING DOCUMENT NUMBER

SYSTEM NUMBER (IF APPLICABLE)

SUBCONTRACTOR/SUPPLIER

ITEM / TAG NO.

TYPE

NO.	INSPECTION	RESULT		
		ACCEPT	REJECT	N/A.
1	No physical damage are found	✓		
2	Type / size / location as per drawings and vendor data sheet	✓		
3	Identification / name plate attached correctly		✓	
4	Stanchion type / mounting as per drawings	✓		
5	Welding (if required) and touch up			✓
6	Anchor bolting / Bolt tightening			✓
7	Grouting (if required)			✓
8	Orientation / direction as per drawings			✓
9	Accessibility	✓		
10	Assembling compartments properly installed	✓		
11	Earthing and bonding properly installed		✓	
12	Cleanliness	✓		

REMARKS:

REFERENCE DOCUMENTS:

SUBCONTRACTOR		PETROJET		ENPPI		PMC	
NAME		NAME		NAME		NAME	
SIGNATURE		SIGNATURE		SIGNATURE		SIGNATURE	
DATE		DATE		DATE		DATE	

ITR-CI-0001



**Enppi**

EGPC CRUDE OIL TANK FARM



Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030  
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001  
Revision No. : 00

## REQUEST FOR INSPECTION

ACTIVITY : CABLE TERMINATION And Splicing

NOTIFICATION NO. : PTJ-INS-RFI-70 DISCIPLINE : E&I

DATE : 5/30/2021

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	CABLE TERMINATION	MODULE 1	30-May-21				
1	030-FD-003						
2	030-AJBF-001						
3							
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NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

	PETROJET	ENPPI	PMC
NAME			
SIGNATURE			
DATE			

ITR-QC-0001





EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

## CABLE TERMINATION AND SPLICING

SYSTEM NO.:

INSPECTION REPORT NUMBER

INSPECTION DATE &amp; TIME

ITR NUMBER

ITR-EL-0009

DISCIPLINE

ELEC

SHEET NO

1 OF 1

Item/Tag NO.

Type :-

Core:

Size:

NO.	Description of check	RESULT		
		ACCEPT	REJECT	N/A.
1	Check cable glands are correct type and size as per cable schedule.	✓		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	✓		
3	Check cable tag is done correctly.	✓		
4	Test and confirm conductor, phase continuity.	✓		
5	Check insulation resistance test (megger) is completed *I	✓		
6	Check Hi-pot test is completed, only for MV/HV cables *II			✓
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.	✓		
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications	✓		
9	Check enclosure cover is installed, no damages and no bolts are missing	✓		
10	Calibration test certificate of testing equipment to be checked.	✓		

Remarks :

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-0009

**Enppi**

EGPC CRUDE OIL TANK FARM



Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030  
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001  
Revision No. : 00**REQUEST FOR INSPECTION**

ACTIVITY : F&amp;G JB INSTALLATION

NOTIFICATION NO. : PTJ-RFI-INS- 76 DISCIPLINE : E&amp;I

DATE : 8/6/2021

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	F&G JB INSTALLATION	AGROOD MODULE 2	6-Aug-21				
1	030-JBF-002						
2							
3							
4							
5							
6							
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8							
9							

**NOTE:**

Inspection result : A - Approved B - Reject C - Approved with Comment

- 1- final touch up for the Support
- 2- earthing for the support and the box (Done) *Sobh*
- 3- Marked up for JB location to be done

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE	<i>Sobh</i>	<i>Islam Sherif</i>	<i>M. Omar</i>
DATE			

ITR-QC-0001



**Enppi****EGPC CRUDE OIL TANK FARM**

INSPECTION AND TEST REPORT FOR

**E&I JUNCTION BOX INSTALLATION**

INSPECTION REPORT NUMBER

INSPECTION DATE &amp; TIME

ITR NUMBER

DISCIPLINE

SHEET NO

ITR-EL-0020

E&amp;I

1 OF 1

EQUIPMENT TAG NUMBER

AREA DESCRIPTION

AGROOD MODULE 2

NO.	Area to be inspected	RESULT		
		ACCEPT	REJECT	N/A.
1	Verify name plate details against data sheet / drawing.	✓		
2	Verify equipment IP rating is suitable for location.	✓		
3	Visually inspect equipment and ensure no external/internal damage.	✓		
4	Check equipment fixings and mountings are secure.	✓		
5	Check earthing conforms to design requirements.		✓	
6	Check mechanical operation of all pushbuttons.			✓
7	Check gaskets and seals are not damaged.	✓		
8	Check all bolts are correct and that none are missing.	✓		
9	Panel doors and glad plates bonded to panels structure.			✓
10	Door locking arrangements correct.			✓
11	Access satisfactory.	✓		
12	Internal terminal strips correctly installed.	✓		
13	Location of equipment as specified in drawing.	✓		

REMARKS:

REFERENCE DOCUMENTS:

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-0010

**Enppi**

EGPC CRUDE OIL TANK FARM



Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030  
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001  
Revision No. : 00**REQUEST FOR INSPECTION**

ACTIVITY : CABLE TERMINATION AND SPLICING AND INSTALLATION

NOTIFICATION NO. : PTJ-INS-RFI- 79 DISCIPLINE : E&amp;I

DATE : 6/9/2021

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	CABLE TERMINATION AND SPLICING AND INSTALLATION	MODULE 1	9-Jun-21				
1	030-PSH-002	1. Cables to layed in the trench and backfilled with soft sand (Done) <u>Sabl</u> 2. S.S. tray missing in both sides (Done) <u>Sabl</u> 3. cables to be systemized in cable tray (Done) <u>Sabl</u> 4. Cable tray cover missing (none) <u>Sabl</u>					
2	030-PSH-004						
3	030-PSH-006						
4	030-PSH-008						
5	030-MCP-001						
6	030-JBF-002						
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19							

**NOTE:**

Inspection result : A - Approved B - Reject C - Approved with Comment

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-QC-0001





## EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

## CABLE TERMINATION AND SPLICING

INSPECTION REPORT NUMBER

INSPECTION DATE &amp; TIME

ITR NUMBER

ITR-EL-0009

SYSTEM NO.:

DISPLINE

ELEC

SHEET NO

1 OF 1

Item/Tag NO.

Type :-

Core:

Size:

NO.	Description of check	RESULT		
		ACCEPT	REJECT	N/A.
1	Check cable glands are correct type and size as per cable schedule.	✓		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	✓		
3	Check cable tag is done correctly.		✓	
4	Test and confirm conductor, phase continuity.	✓		
5	Check insulation resistance test (megger) is completed *I	✓		
6	Check Hi-pot test is completed, only for MV/HV cables *II			✓
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.	✓		
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications	✓		
9	Check enclosure cover is installed, no damages and no bolts are missing	✓		
10	Calibration test certificate of testing equipment to be checked.			✓

Remarks :

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-0009

**Enppi****EGPC CRUDE OIL TANK FARM**Owner : **Egyptian General Petroleum Corporation (EGPC)**Project No: 01251-100-030  
:01251-100-031Contractor **CONSORTIUM (ENPPI / PETROJET)**Document No: ITR-QC-0001  
Revision No. : 00**REQUEST FOR INSPECTION**ACTIVITY : **F&G DEVICE TERMINATION**NOTIFICATION NO. : **PTJ-INST-RFI-80** DISCIPLINE : **F&G**DATE : **6/10/2021**

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	<b>F&amp;G device TERMINATION</b>	<b>Field</b>	<b>10-Jun-21</b>				
1	030-STR-002						
2	030-STB-002						
3	030-HR-002						
4	030-PSH-001 A						
5	030-PSH-001 B						
6	030-PSH-001 C						
7	030-PSH-001 D						
8	030-PSH-003 A						
9	030-PSH-003 B						
10	030-PSH-003 C						
11	030-PSH-003 D						
12	030-PSH-007 A						
13	030-PSH-007 B						
14	030-PSH-007 C						
15	030-PSH-007 D						
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27							

**NOTE:**

Inspection result : A - Approved B - Reject C - Approved with Comment

*all tags must be installed. (Done) SOB*

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
DATE			





## EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

## CABLE TERMINATION AND SPLICING

SYSTEM NO.:

INSPECTION REPORT NUMBER

INSPECTION DATE &amp; TIME

ITR NUMBER

DISCIPLINE

SHEET NO

PTJ-INST-RFI-

ITR-EL-0009

INST

1 OF 1

Item/Tag NO.

Type :-

Core:

Size:

NO.	Description of check	RESULT		
		ACCEPT	REJECT	N/A.
1	Check cable glands are correct type and size as per cable schedule.	✓		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	✓		
3	Check cable tag is done correctly.			✓
4	Test and confirm conductor, phase continuity.	✓		
5	Check insulation resistance test (megger) is completed *	✓		
6	Check Hi-pot test is completed, only for MV/HV cables **	✗		✓
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.	✓		
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications			✓
9	Check enclosure cover is installed, no damages and no bolts are missing			✓
10	Calibration test certificate of testing equipment to be checked.			✓

Remarks :

\* : ITR-EL-006A/B

\*\* : ITR-EL-008

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-0009

**Enppi****EGPC CRUDE OIL TANK FARM**Owner : **Egyptian General Petroleum Corporation (EGPC)**Project No: 01251-100-030  
:01251-100-031Contractor : **CONSORTIUM (ENPPI / PETROJET)**Document No: ITR-QC-0001  
Revision No. : 00**REQUEST FOR INSPECTION**ACTIVITY : **CABLE TERMINATION AND SPLICING / Installation**NOTIFICATION NO. : **PTJ-INST-RFI-81** DISCIPLINE : **F&G**DATE : **6/10/2021**

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	<b>CABLE TERMINATION</b>	<b>Field</b>	<b>10-Jun-21</b>				
1	030-STB-001						
2	030-STR-001						
3	030-HR-001						
4	030-MCP-008						
5	030-LHD-007						
6	030-LHD-008						
7	030-JBF-003						
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25							
26							

**NOTE:**

Inspection result : A - Approved B - Reject C - Approved with Comment

*- tag to be install (Dow) set*

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
DATE			





## EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

## CABLE TERMINATION AND SPLICING

SYSTEM NO.:

INSPECTION REPORT NUMBER

INSPECTION DATE &amp; TIME

ITR NUMBER

DISCIPLINE

SHEET NO

PTJ-INST-RFI-

ITR-EL-0009

INST

1 OF 1

Item/Tag NO.

Type :-

Core:

Size:

NO.	Description of check	RESULT		
		ACCEPT	REJECT	N/A.
1	Check cable glands are correct type and size as per cable schedule.	✓		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	✓		
3	Check cable tag is done correctly.	✓		
4	Test and confirm conductor, phase continuity.	✓		
5	Check insulation resistance test (megger) is completed *I	✓		
6	Check Hi-pot test is completed, only for MV/HV cables *II			✓
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.	✓		
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications	✓		
9	Check enclosure cover is installed, no damages and no bolts are missing	✓		
10	Calibration test certificate of testing equipment to be checked.	✓		

Remarks :

\*I : ITR-EL-006A/B

\*II : ITR-EL-008

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-0009

**Enppi****EGPC CRUDE OIL TANK FARM**

Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030  
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001  
Revision No. : 00**REQUEST FOR INSPECTION**

ACTIVITY : INS INSTALLATION &amp; TERMINATION

NOTIFICATION NO. : PTJ-INS-RFI- 142 DISCIPLINE : E&amp;I

DATE : 6/30/2021

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	INS INSTALLATION & TERMINATION	MODULE	30-Jun-21				
1	030-FD-005						
2	030-FD-007						
3	030-FD-008						
4	030-FD-009						
5	030-FD-010						
6	030-FD-011						
7	030-FD-012						
8	030-FD-013						
9	030-GD-007						
10	030-GD-008						
11	030-GD-009						
12	030-GD-010						
13	030-GD-011						
14	030-GD-012						
15	030-GD-013						
16	030-GD-014						
17	030-GD-015						
18	030-PSH-009						
19	030-PSH-010						
20	030-SV-001						
21	030-SV-002						
22	030-AJBF-002						
	030-AJBF-003						
	030-FD-006						

**NOTE:**

Inspection result : A - Approved B - Reject C - Approved with Comment

1-5.5 tag missing (Done) 2- Sharp edge missing (Done) 3- Arbitrary core missing 4- Earthing to be connected (Done)

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE		® Islam Sherif	
DATE			

ITR-QC-0001





## EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

## CABLE TERMINATION AND SPLICING

SYSTEM NO.:

INSPECTION REPORT NUMBER

INSPECTION DATE &amp; TIME

ITR NUMBER

ITR-EL-0009

DISCIPLINE

ELEC

SHEET NO

1 OF 1

Item/Tag NO.

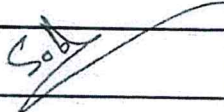
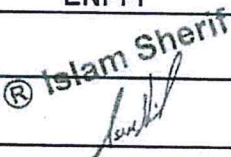
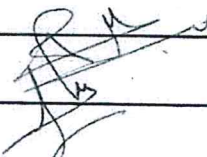
Type :-

Core:

Size:

NO.	Description of check	RESULT		
		ACCEPT	REJECT	N/A.
1	Check cable glands are correct type and size as per cable schedule.	✓		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	✓		
3	Check cable tag is done correctly.		✓	
4	Test and confirm conductor, phase continuity.	✓		
5	Check insulation resistance test (megger) is completed *I	✓		
6	Check HI-pot test is completed, only for MV/HV cables **			✓
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.	✓		
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications	✓		
9	Check enclosure cover is installed, no damages and no bolts are missing	✓		
10	Calibration test certificate of testing equipment to be checked.			✓

Remarks :

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-0009



**Enppi**

EGPC CRUDE OIL TANK FARM



Owner : Egyptian General Petroleum Corporation (EGPC)

Project No: 01251-100-030  
:01251-100-031

Contractor CONSORTIUM (ENPPI / PETROJET)

Document No: ITR-QC-0001  
Revision No. : 00**REQUEST FOR INSPECTION**

ACTIVITY : INSTRUMENT INSTALLATION &amp; TERMINATION

NOTIFICATION NO. : PTJ-INS-RFI- 106 DISCIPLINE : E&amp;I

DATE : 7/7/2021

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	INSTRUMENT INSTALLATION & TERMINATION	MODULE 1	7-Jul-21				
1	030-GD-005						
2	030-GD-006						
3							
4							
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22							

**NOTE:**

Inspection result : A - Approved B - Reject C - Approved with Comment

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-QC-0001



## EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

## CABLE TERMINATION AND SPLICING

SYSTEM NO.:

INSPECTION REPORT NUMBER

INSPECTION DATE &amp; TIME

ITR NUMBER

ITR-EL-0009

DISCIPLINE

ELEC

SHEET NO

1 OF 1

Item/Tag NO.

Type :-

Core:

Size:

NO.	Description of check	RESULT		
		ACCEPT	REJECT	N/A.
1	Check cable glands are correct type and size as per cable schedule.	✓		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	✓		
3	Check cable tag is done correctly.		✓	
4	Test and confirm conductor, phase continuity.	✓		
5	Check insulation resistance test (megger) is completed *1	✓		
6	Check Hi-pot test is completed, only for MV/HV cables *11			✓
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.	✓		
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications	✓		
9	Check enclosure cover is installed, no damages and no bolts are missing	✓		
10	Calibration test certificate of testing equipment to be checked.			✓

Remarks :

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-EL-0009





EGPC CRUDE OIL TANK FARM  
AGROOD AREA (MODULE 1 & 2)



INSPECTION AND TEST REPORT FOR

INSTRUMENT INSTALLATION

INSPECTION REPORT NUMBER	INSPECTION DATE & TIME	ITR NUMBER ITR-IC-0001	DISPLINE INSTRUMENT	SHEET NO
--------------------------	------------------------	---------------------------	------------------------	----------

JOB DESCRIPTION		AREA DESCRIPTION	
ENGINEERING DOCUMENT NUMBER		SYSTEM NUMBER(IF APPLICABLE)	SUBCONTRACTOR/SUPPLIER
ITEM / TAG NO.		TYPE	

NO.	INSPECTION	RESULT		
		ACCEPT	REJECT	N/A.
1	No physical damage are found	✓		
2	Type / size / location as per drawings and vendor data sheet	✓		
3	Identification / name plate attached correctly		✓	
4	Stanchion type / mounting as per drawings	✓		
5	Welding (if required) and touch up			✓
6	Anchor bolting / Bolt tightening	✓		
7	Grouting (if required)	✓		✓
8	Orientation / direction as per drawings	✓		
9	Accessibility	✓		
10	Assembling compartments properly installed	✓		
11	Earthing and bonding properly installed		✓	
12	Cleanliness	✓		

REMARKS:

REFERENCE DOCUMENTS:

SUBCONTRACTOR	PETROJET	ENPPI	PMC
NAME	NAME	NAME	NAME
SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE
DATE	DATE	DATE	DATE

ITR-CI-0001







## EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

## LVSWG AND PANEL INSTALLATION

INSPECTION REPORT NUMBER

PTJ-EN-RFI-38

INSPECTION DATE &amp; TIME

DOCUMENT No.

ITR-EL-0012

DISCIPLINE

ELECTRICAL

SHEET NO

JOB DESCRIPTION

AREA DESCRIPTION

AGROUD MODULE 2 SUB BUILDING

NO.	INSPECTION	RESULT		
		ACCEPT	REJECT	N/A.
1	Verify that equipment name plates are according to the corresponding drawing	✓		
2	Inspect physical and mechanical condition of the equipment and all components for clear damage.	✓		
3	Verify appropriate anchorage, required area clearances, physical damage, and correct alignment and cleanliness.	✓		
4	Inspect all doors, panels, and sections for paint, dents, scratches, fit, and missing hardware.	✓		
5	Verify that the barriers and covers are installed correctly.			✓
6	Verify that filters are in place and all ventilation openings are clear from any kind of obstacles.			✓
7	Verify that main bus bar is connected between the cells.			✓
8	Verify that the earth bar is connected between the cells and connected to the earth.			
9	Verify the tightness of accessible bolted electrical connections using the calibrated torque-wrench method			✓
10	After tightening each electrical connection to the appropriate torque, apply some Varnish between the nut and the screw (or else, between the screw's head and the			✓
11	Confirm that lubricants have been correctly applied at the recommended locations.			✓
12	Inspect all mechanical indicating devices for correct operation.			✓
13	Verify that draw out disconnecting contacts and interlocks function correctly.			✓
14	Verify that fuse and/or circuit breaker size and type correspond to drawings.			✓
15	Verify that current and potential transformer ratios correspond to drawings.			✓
16	Verify that all the interconnection control wires between the cells have been made correctly reference to the control drawings	✓		
17	Verify that customer connections to remote power, operators, interlocks, and indicators have been made.	✓		

REMARKS:

REFERENCE DOCUMENTS:

	PETROJET	ENPPI	PMC
NAME:			
SIGNATURE	<i>Sobh</i>	<i>Rezaei</i>	<i>M. omay</i>
DATE			



Owner : **Egyptian General Petroleum Corporation (EGPC)**

Project No: 01251-100-030  
:01251-100-031

Contractor **CONSORTIUM (ENPPI / PETROJET)**

Document No: ITR-QC-0001  
Revision No. : 00

### REQUEST FOR INSPECTION

ACTIVITY : **CABLE TERMINATION AND TEST**

NOTIFICATION NO. : **PTJ-ELE-RFI-169** DISCIPLINE : **ELEC**

DATE : **10/04/2021**

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
35	P3-030-PLC-SC-003	SUBSTATION					
36	P3-030-PLC-SC-004	SUBSTATION					
37	P3-030-TGS-001	SUBSTATION					
38	P3-030-FGS-SC-001	SUBSTATION					
39	C2-030-PM-01A	SUBSTATION					
40	C2-030-PM-01B	SUBSTATION					
41	C2-030-PM-01C	SUBSTATION					
42	C2-030-PM-02	SUBSTATION					
43	C2-030-PM-06A	SUBSTATION					
44	C2-030-PM-06B	SUBSTATION					
45	C2-030-PM-06C	SUBSTATION					
46	C2-030-PM-06D	SUBSTATION					
47	M-030-PM-04A	SUBSTATION					
48	M-030-PM-04B	SUBSTATION					
49	M-030-PM-05A	SUBSTATION					
50	M-030-PM-05B	SUBSTATION					
51	P-030-P-16A	SUBSTATION					
52	P-030-P-16B	SUBSTATION					
53	C-030-EPM1-LVSWG	SUBSTATION					

**NOTE:**

Inspection result : A - Approved B - Reject C - Approved with Comment

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			



Owner : **Egyptian General Petroleum Corporation (EGPC)**

Project No: 01251-100-030  
:01251-100-031

Contractor **CONSORTIUM (ENPPI / PETROJET)**

Document No: ITR-QC-0001  
Revision No. : 00

### REQUEST FOR INSPECTION

ACTIVITY : **CABLE TERMINATION AND TEST**

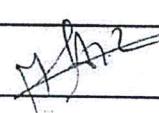
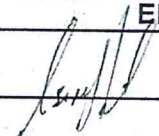
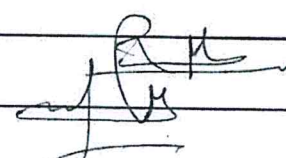
NOTIFICATION NO. : **PTJ-ELE-RFI-169** DISCIPLINE : **ELEC**

DATE : **10/04/2021**

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
18	C4-030-SUB-ACUPS-1	SUBSTATION					
19	C3-030-SUB-DCUPS-1	SUBSTATION					
20	C4-030-SUB-DCUPS-1	SUBSTATION					
21	P1-030-PLC-SC-001	SUBSTATION					
22	P2-030-PLC-SC-001	SUBSTATION					
23	P1-030-PLC-SC-002	SUBSTATION					
24	P2-030-PLC-SC-002	SUBSTATION					
25	P1-030-PLC-SC-003	SUBSTATION					
26	P2-030-PLC-SC-003	SUBSTATION					
27	P1-030-PLC-SC-004	SUBSTATION					
28	P2-030-PLC-SC-004	SUBSTATION					
29	P1-030-FGS-SC-001	SUBSTATION					
30	P2-030-FGS-SC-001	SUBSTATION					
31	P1-030-TGS-001	SUBSTATION					
32	P2-030-TGS-001	SUBSTATION					
33	P3-030-PLC-SC-001	SUBSTATION					
34	P3-030-PLC-SC-002	SUBSTATION					

**NOTE:**

Inspection result : A - Approved B - Reject C - Approved with Comment

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			

ITR-QC-0001



## EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

## CABLE TERMINATION AND SPLICING

INSPECTION REPORT NUMBER

PTJ-ELE-RFI-

INSPECTION DATE &amp; TIME

10/04/2021

ITR NUMBER

ITR-EL-0009

SYSTEM NO.:

DISPLINE

ELEC

SHEET NO

1 OF 1

Item/Tag NO.

For All Cables tages in PTJ-ELE-RFI-

Type :-

Core:

Size:

NO.	Description of check	RESULT		
		ACCEPT	REJECT	N/A.
1	Check cable glands are correct type and size as per cable schedule.	✓		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	✓		
3	Check cable tag is done correctly.	✓		
4	Test and confirm conductor, phase continuity.	✓		
5	Check insulation resistance test (megger) is completed * <sup>1</sup>	✓		
6	Check Hi-pot test is completed, only for MV/HV cables * <sup>11</sup>			
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.	✓		✓
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications			✓
9	Check enclosure cover is installed, no damages and no bolts are missing	✓		
10	Calibration test certificate of testing equipment to be checked.	✓		

Remarks :

\*<sup>1</sup> : ITR-EL-006A/B\*<sup>11</sup> : ITR-EL-008

NAME :	PETROJET	ENPPI	PMC
SIGNATURE			
DATE			

ITR-EL-0009





Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 12.08- FAT Reports & Certificates





Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 12.09- SAT Reports & Certificates

System ID	030-LP-003
System Description	Field Fire detection PLC system

## 12.10- Electrical Pre-Commissioning Check Lists

## PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Electrical

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : P3-030-FGS-SC-001

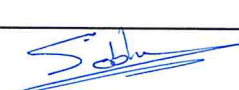
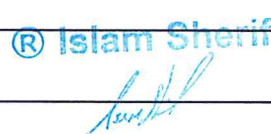
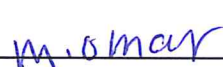
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, termination and joints of cables are correctly executed.	✓	
7	Inspect cables for jacket damage.	✓	
8	Ensure that the correct size and type of crimping lugs have been used.	✓	
9	Check that the bending radius of cables is not less than the minimum established.	✓	
10	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
11	Tie wraps to be used for cable and wires fixation.	✓	

### REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Electrical

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : P3-030-FGS-SC-001


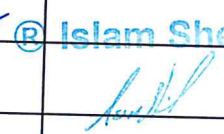
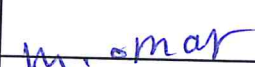
**AREA** : 30

**REF. DWGS/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Trench markers to be checked w.r.t approved documents.	N/A	
13	Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables.	✓	
14	Inspect cable laid in trenches, segregation and protection.	N/A	
15	Cables to be tested (continuity/insulation resistance).(*)	✓	
16	Equipment test report and inspection certificate to be-checked.	✓	
17	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
18	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



**PRE-COMMISSIONING CHECK LIST  
MEDIUM VOLTAGE CABLES**

**EL-31 A**

**INSULATION TEST**

**EL-31 A**

CABLE VOLTAGE LEVEL	D.C TEST VOLTAGE	MINIMUM INSULATION RESISTANCE (M.OHMS).
3.3kV	2500V	200
6.6kV & Above	5000V	200

**TABLE [I]**

**NOTES:**

## PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Electrical

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : P2- 030-FGS-SC-001


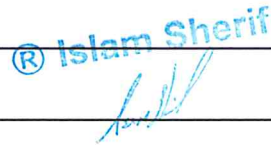
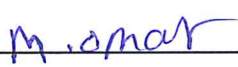
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, termination and joints of cables are correctly executed.	✓	
7	Inspect cables for jacket damage.	✓	
8	Ensure that the correct size and type of crimping lugs have been used.	✓	
9	Check that the bending radius of cables is not less than the minimum established.	✓	
10	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
11	Tie wraps to be used for cable and wires fixation.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Electrical

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : P2- 030-FGS-SC-001

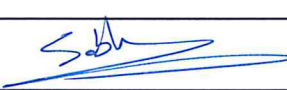


**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Trench markers to be checked w.r.t approved documents.	N/A	
13	Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables.	✓	
14	Inspect cable laid in trenches, segregation and protection.	N/A	
15	Cables to be tested (continuity/insulation resistance).(*)	✓	
16	Equipment test report and inspection certificate to be-checked.	✓	
17	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
18	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



**PRE-COMMISSIONING CHECK LIST  
MEDIUM VOLTAGE CABLES**

**EL-31 A**

**INSULATION TEST**

**EL-31 A**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
3.3kV	2500V	200
6.6kV & Above	5000V	200

**TABLE [I]**

**NOTES:**

## PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Electrical

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : P1- 030-FGS-SC-001

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, termination and joints of cables are correctly executed.	✓	
7	Inspect cables for jacket damage.	✓	
8	Ensure that the correct size and type of crimping lugs have been used.	✓	
9	Check that the bending radius of cables is not less than the minimum established.	✓	
10	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
11	Tie wraps to be used for cable and wires fixation.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		Islam Sherif	
SIGNATURE	Sobh	Islam Sherif	M. Omar
DATE			



## PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Electrical

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : P1- 030-FGS-SC-001



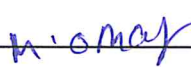
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Trench markers to be checked w.r.t approved documents.	N/A	
13	Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables.	✓	
14	Inspect cable laid in trenches, segregation and protection.	N/A	
15	Cables to be tested (continuity/insulation resistance).(*)	✓	
16	Equipment test report and inspection certificate to be-checked.	✓	
17	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
18	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		@ Islam Sherif	
SIGNATURE			
DATE			



**PRE-COMMISSIONING CHECK LIST  
MEDIUM VOLTAGE CABLES  
EL-31 A**

**INSULATION TEST**

**EL-31 A**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
3.3kV	2500V	200
6.6kV & Above	5000V	200

**TABLE [I]**

**NOTES:**

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-FD-010


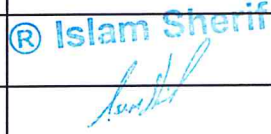
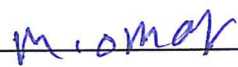
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-FD-009


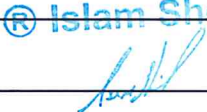

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		 <b>Islam Sherif</b>	
DATE			

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-FD-008


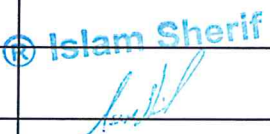
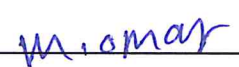
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
<b>1</b>	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

### REMARKS AND OBSERVATIONS :

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-FD-007

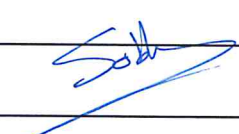


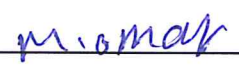
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
<b>1</b>	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		 	
DATE			



## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-FD-006

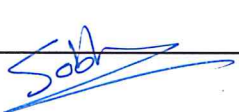
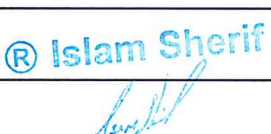

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-FD-005


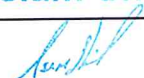
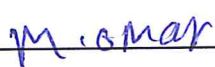
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-GD-015

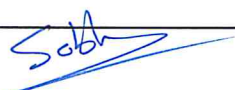
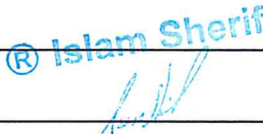
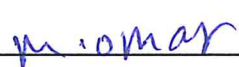
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
<b>1</b>	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-GD-014




**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-GD-013



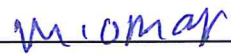
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-GD-012

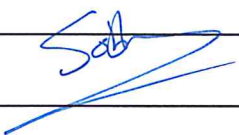

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		@ Islam Sherif 	M. I. M. A. R.
DATE			



## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-GD-011

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

### REMARKS AND OBSERVATIONS :

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		@ Islam Sherif	
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-GD-010

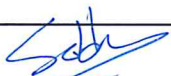
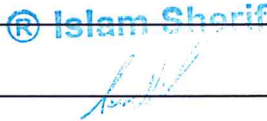
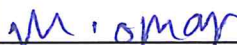
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-GD-009

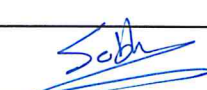


**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-GD-008



**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		® Islam Sherif 	m.omar
DATE			

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-GD-007


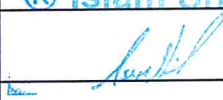

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-GD-006


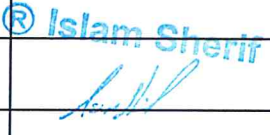
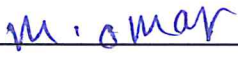
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-GD-005



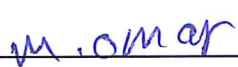
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-F&G-SC-001


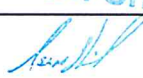
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**REF. DWGs/DOCs** :



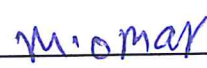
No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	N/A	
1.2	Detector placed in the correct elevation as per the distribution drawings.	N/A	
1.3	Detector mounted in the correct orientation as per common engineering practice.	N/A	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	N/A	
1.6	Detector is properly fixed.	N/A	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	N/A	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

### REMARKS AND OBSERVATIONS :

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			M. Omar
DATE			

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

<b>PROJECT TITLE</b> : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)			
<b>PROJECT NUMBER</b> : 1251-100		<b>DISCIPLINE</b> : Loss Prevention	
<b>SYSTEM NAME</b> : Field Fire Detection PLC system		<b>SYSTEM ID</b> : 030-LP-003	
<b>SUB-SYSTEM NAME</b> : Field Fire Detection PLC system		<b>SUB-SYSTEM ID</b> : 030-LP-003	
<b>ITEM TAG No.</b> : 030-F&G-MC-001		<b>AREA</b> : 30	
<b>REF. DWGs/DOCs</b> :			
No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
<b>1</b>	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	N/A	
1.2	Detector placed in the correct elevation as per the distribution drawings.	N/A	
1.3	Detector mounted in the correct orientation as per common engineering practice.	N/A	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	N/A	
1.6	Detector is properly fixed.	N/A	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	N/A	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	
<b>REMARKS AND OBSERVATIONS :</b>			
<b>OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.</b>			
<b>COMPANY</b>	<b>CONST. CONTRACTOR</b>	<b>ENPPI</b>	<b>CUSTOMER</b>
<b>NAME</b>			
<b>SIGNATURE</b>			
<b>DATE</b>			



## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-AJBF-002



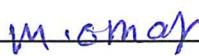
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	/	
2	Check equipment fixings & mountings are secure.	/	
3	Properly support and accessible.	/	
4	Check equipment nameplate details.	/	
5	Check junction box against area classification.	/	
6	Inspect junction box for mechanical damage.	/	
7	Type and size of cable glands to be checked.	/	
8	Check all connections are tight, correct & have cable markings fitted.	/	
9	Check local junction box inside & outside cleaning.	/	
10	Check local junction box for sealing & tightening.	/	
11	Check local junction box earthing cables termination & connection.	✓	

### REMARKS AND OBSERVATIONS :

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-AJBF-002


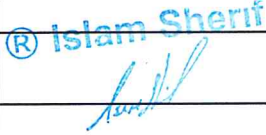
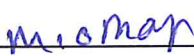
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Unused cable entries to be plugged correctly.	✓	
13	Wire identifications and cable markers to be checked w.r.t cable list.	✓	
14	Unused cable entries to be plugged correctly.	✓	
15	Check cable glands (sizes, tightened,....etc.) and gland plates.	✓	
16	Cable terminations to be checked w.r.t approved documents.	✓	
17	Contractor marked up drawings is available.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-AJBF-003


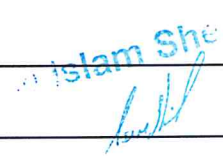
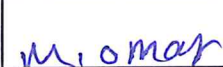
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check equipment fixings & mountings are secure.	✓	
3	Properly support and accessible.	✓	
4	Check equipment nameplate details.	✓	
5	Check junction box against area classification.	✓	
6	Inspect junction box for mechanical damage.	✓	
7	Type and size of cable glands to be checked.	✓	
8	Check all connections are tight, correct & have cable markings fitted.	✓	
9	Check local junction box inside & outside cleaning.	✓	
10	Check local junction box for sealing & tightening.	✓	
11	Check local junction box earthing cables termination & connection.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-AJBF-003


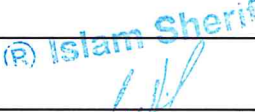
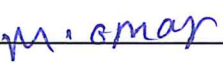
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Unused cable entries to be plugged correctly.	✓	
13	Wire identifications and cable markers to be checked w.r.t cable list.	✓	
14	Unused cable entries to be plugged correctly.	✓	
15	Check cable glands (sizes, tightened,....etc.) and gland plates.	✓	
16	Cable terminations to be checked w.r.t approved documents.	✓	
17	Contractor marked up drawings is available.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-006


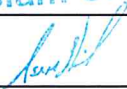
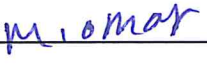
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check equipment fixings & mountings are secure.	✓	
3	Properly support and accessible.	✓	
4	Check equipment nameplate details.	✓	
5	Check junction box against area classification.	✓	
6	Inspect junction box for mechanical damage.	✓	
7	Type and size of cable glands to be checked.	✓	
8	Check all connections are tight, correct & have cable markings fitted.	✓	
9	Check local junction box inside & outside cleaning.	✓	
10	Check local junction box for sealing & tightening.	✓	
11	Check local junction box earthing cables termination & connection.	✓	

### REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-006


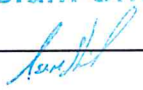
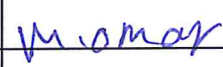
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Unused cable entries to be plugged correctly.	✓	
13	Wire identifications and cable markers to be checked w.r.t cable list.	✓	
14	Unused cable entries to be plugged correctly.	✓	
15	Check cable glands (sizes, tightened,....etc.) and gland plates.	✓	
16	Cable terminations to be checked w.r.t approved documents.	✓	
17	Contractor marked up drawings is available.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		® Islam Sherif 	
DATE			



## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-005

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check equipment fixings & mountings are secure.	✓	
3	Properly support and accessible.	✓	
4	Check equipment nameplate details.	✓	
5	Check junction box against area classification.	✓	
6	Inspect junction box for mechanical damage.	✓	
7	Type and size of cable glands to be checked.	✓	
8	Check all connections are tight, correct & have cable markings fitted.	✓	
9	Check local junction box inside & outside cleaning.	✓	
10	Check local junction box for sealing & tightening.	✓	
11	Check local junction box earthing cables termination & connection.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		® Islam Sherif	
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-005


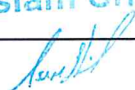
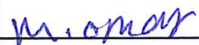
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Unused cable entries to be plugged correctly.	✓	
13	Wire identifications and cable markers to be checked w.r.t cable list.	✓	
14	Unused cable entries to be plugged correctly.	✓	
15	Check cable glands (sizes, tightened,....etc.) and gland plates.	✓	
16	Cable terminations to be checked w.r.t approved documents.	✓	
17	Contractor marked up drawings is available.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		® Islam Sherif 	
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-003

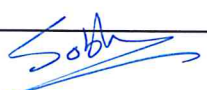
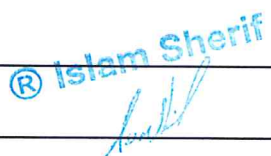
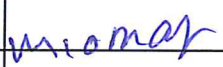
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check equipment fixings & mountings are secure.	✓	
3	Properly support and accessible.	✓	
4	Check equipment nameplate details.	✓	
5	Check junction box against area classification.	✓	
6	Inspect junction box for mechanical damage.	✓	
7	Type and size of cable glands to be checked.	✓	
8	Check all connections are tight, correct & have cable markings fitted.	✓	
9	Check local junction box inside & outside cleaning.	✓	
10	Check local junction box for sealing & tightening.	✓	
11	Check local junction box earthing cables termination & connection.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-003

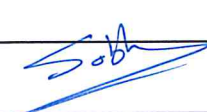

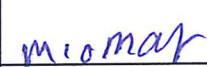
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Unused cable entries to be plugged correctly.	✓	
13	Wire identifications and cable markers to be checked w.r.t cable list.	✓	
14	Unused cable entries to be plugged correctly.	✓	
15	Check cable glands (sizes, tightened,....etc.) and gland plates.	✓	
16	Cable terminations to be checked w.r.t approved documents.	✓	
17	Contractor marked up drawings is available.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-004

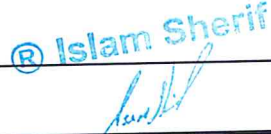

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check equipment fixings & mountings are secure.	✓	
3	Properly support and accessible.	✓	
4	Check equipment nameplate details.	✓	
5	Check junction box against area classification.	✓	
6	Inspect junction box for mechanical damage.	✓	
7	Type and size of cable glands to be checked.	✓	
8	Check all connections are tight, correct & have cable markings fitted.	✓	
9	Check local junction box inside & outside cleaning.	✓	
10	Check local junction box for sealing & tightening.	✓	
11	Check local junction box earthing cables termination & connection.	✓	

### REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-004



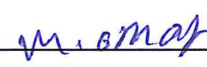

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Unused cable entries to be plugged correctly.	✓	
13	Wire identifications and cable markers to be checked w.r.t cable list.	✓	
14	Unused cable entries to be plugged correctly.	✓	
15	Check cable glands (sizes, tightened,....etc.) and gland plates.	✓	
16	Cable terminations to be checked w.r.t approved documents.	✓	
17	Contractor marked up drawings is available.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE	 		
DATE			



## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-AJBF-001

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check equipment fixings & mountings are secure.	✓	
3	Properly support and accessible.	✓	
4	Check equipment nameplate details.	✓	
5	Check junction box against area classification.	✓	
6	Inspect junction box for mechanical damage.	✓	
7	Type and size of cable glands to be checked.	✓	
8	Check all connections are tight, correct & have cable markings fitted.	✓	
9	Check local junction box inside & outside cleaning.	✓	
10	Check local junction box for sealing & tightening.	✓	
11	Check local junction box earthing cables termination & connection.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam S.	
SIGNATURE	Sobh	Amr	M.omar
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-AJBF-001



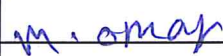
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Unused cable entries to be plugged correctly.	✓	
13	Wire identifications and cable markers to be checked w.r.t cable list.	✓	
14	Unused cable entries to be plugged correctly.	✓	
15	Check cable glands (sizes, tightened,....etc.) and gland plates.	✓	
16	Cable terminations to be checked w.r.t approved documents.	✓	
17	Contractor marked up drawings is available.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-002-Cable


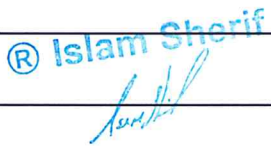
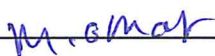
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-002-Cable


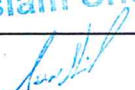

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	✓	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be-checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
19	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			
DATE			



**PRE-COMMISSIONING CHECK LIST  
FIRE AND GAS CABLES  
LP-11 A**



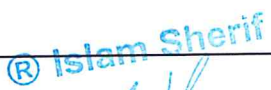
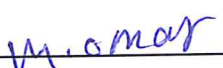
**INSULATION TEST  
LOW VOLTAGE CABLES**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
1000V	1000V	200

**NOTES:**

- Manufacture's test voltage & minimum values for insulation resistance should be referenced.

## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

<b>PROJECT TITLE</b> : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)			
<b>PROJECT NUMBER</b> : 1251-100		<b>DISCIPLINE</b> : Loss Prevention	
<b>SYSTEM NAME</b> : Field Fire Detection PLC system		<b>SYSTEM ID</b> : 030-LP-003	
<b>SUB-SYSTEM NAME</b> : Field Fire Detection PLC system		<b>SUB-SYSTEM ID</b> : 030-LP-003	
<b>ITEM TAG No.</b> : 030-JBF-003-Cable		<b>AREA</b> : 30	
<b>REF. DWGs/DOCs</b> :			
No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	N/A	
<b>REMARKS AND OBSERVATIONS :</b>			
<b>OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.</b>			
<b>COMPANY</b>	<b>CONST. CONTRACTOR</b>	<b>ENPPI</b>	<b>CUSTOMER</b>
<b>NAME</b>			
<b>SIGNATURE</b>		 	
<b>DATE</b>			



## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-003-Cable

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	✓	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be-checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
19	Calibration test certificate of testing equipment to be checked.	✓	

### REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		Islam Sherif	
SIGNATURE	Sabl		M. Omar
DATE			



**PRE-COMMISSIONING CHECK LIST**  
**FIRE AND GAS CABLES**  
**LP-11 A**

**INSULATION TEST**  
**LOW VOLTAGE CABLES**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
1000V	1000V	200

**NOTES:**

- Manufacture's test voltage & minimum values for insulation resistance should be referenced.

## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-004-Cable

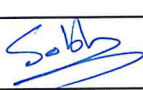
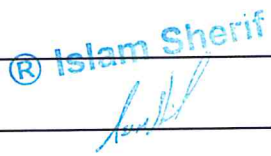
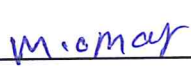
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		 ® Islam Sherif	
DATE			



## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-004-Cable



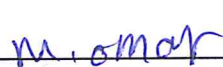
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	✓	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be-checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
19	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			
DATE			



**PRE-COMMISSIONING CHECK LIST**  
**FIRE AND GAS CABLES**  
**LP-11 A**

**INSULATION TEST**  
**LOW VOLTAGE CABLES**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
1000V	1000V	200

**NOTES:**

- Manufacture's test voltage & minimum values for insulation resistance should be referenced.

## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-005-Cable

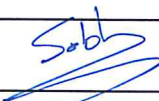

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			M. Omar
DATE			



## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-005-Cable


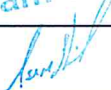
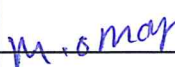
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	✓	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be-checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
19	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherrif	
SIGNATURE			
DATE			



**PRE-COMMISSIONING CHECK LIST**  
**FIRE AND GAS CABLES**  
**LP-11 A**

**INSULATION TEST**  
**LOW VOLTAGE CABLES**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
1000V	1000V	200

**NOTES:**

- Manufacture's test voltage & minimum values for insulation resistance should be referenced.

## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-006-Cable

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-006-Cable

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	✓	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be-checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
19	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		 ® Islam Sherif	
DATE			



**PRE-COMMISSIONING CHECK LIST  
FIRE AND GAS CABLES  
LP-11 A**

**INSULATION TEST  
LOW VOLTAGE CABLES**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
1000V	1000V	200

**NOTES:**

- Manufacture's test voltage & minimum values for insulation resistance should be referenced.

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-FD-012



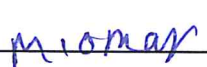
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
<b>1</b>	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-FD-013




**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
<b>1</b>	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		 <b>Islam Sherif</b>	
DATE			

## PRE-COMMISSIONING CHECK LIST DETECTOR LP-13 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-FD-011




**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	<b>FIRE AND GAS DETECTOR:</b>		
1.1	Detector placed in the correct location as per the distribution drawings.	✓	
1.2	Detector placed in the correct elevation as per the distribution drawings.	✓	
1.3	Detector mounted in the correct orientation as per common engineering practice.	✓	
1.4	Outlet tags are according to the drawing & correctly placed.	✓	
1.5	Detector is in good condition and has no physical/mechanical damage.	✓	
1.6	Detector is properly fixed.	✓	
1.7	Detector type and model number are as mentioned in the drawings/purchase order.	✓	
1.8	Check accessibility for maintenance.	✓	
1.9	Check that there are no missing parts.	✓	
1.10	Check/perform Pre-comm. check lists for all cables connected/wired to the outlet.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-007-Cable


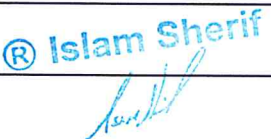
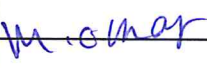
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	N/A	

### REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-007-Cable

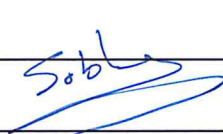
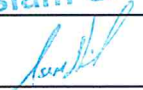
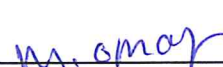
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	✓	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be-checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
19	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			
DATE			



**PRE-COMMISSIONING CHECK LIST**  
**FIRE AND GAS CABLES**  
**LP-11 A**

**INSULATION TEST**  
**LOW VOLTAGE CABLES**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
1000V	1000V	200

**NOTES:**

- Manufacture's test voltage & minimum values for insulation resistance should be referenced.

## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-008-Cable


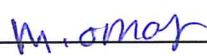

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		® Islam Sherif	
DATE			



## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-008-Cable

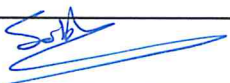
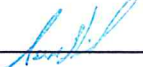
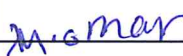
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	✓	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be-checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
19	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		@ Islam Sherif	
SIGNATURE			
DATE			



**PRE-COMMISSIONING CHECK LIST**  
**FIRE AND GAS CABLES**  
**LP-11 A**

**INSULATION TEST**

**LOW VOLTAGE CABLES**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
1000V	1000V	200

**NOTES:**

- Manufacture's test voltage & minimum values for insulation resistance should be referenced.

## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-009-Cable




**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		® Islam Sherif 	
DATE			



## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-009-Cable


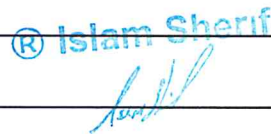
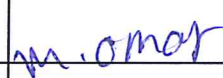
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	✓	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be-checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
19	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		 <b>Islam Sherif</b>	
DATE			



**PRE-COMMISSIONING CHECK LIST**  
**FIRE AND GAS CABLES**  
**LP-11 A**

**INSULATION TEST**  
**LOW VOLTAGE CABLES**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
1000V	1000V	200

**NOTES:**

- Manufacture's test voltage & minimum values for insulation resistance should be referenced.

## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-AJBF-002-Cable


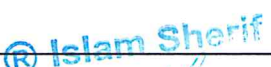
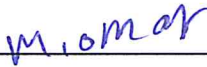
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-AJBF-002-Cable

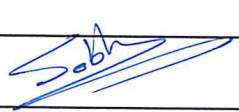
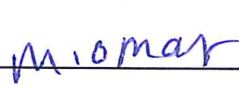
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	✓	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be-checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
19	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



**PRE-COMMISSIONING CHECK LIST  
FIRE AND GAS CABLES  
LP-11 A**

**INSULATION TEST  
LOW VOLTAGE CABLES**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
1000V	1000V	200

**NOTES:**

- Manufacture's test voltage & minimum values for insulation resistance should be referenced.

## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-AJBF-003-Cable

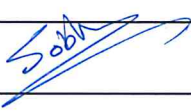
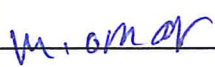
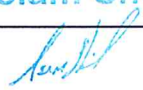
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		® Islam Sherif	
DATE			



## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-AJBF-003-Cable


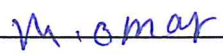
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	✓	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be-checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
19	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			
DATE			



**PRE-COMMISSIONING CHECK LIST**  
**FIRE AND GAS CABLES**  
**LP-11 A**

**INSULATION TEST**  
**LOW VOLTAGE CABLES**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
1000V	1000V	200

**NOTES:**

- Manufacture's test voltage & minimum values for insulation resistance should be referenced.

## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-AJBF-001-Cable



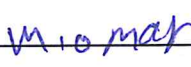
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-AJBF-001-Cable


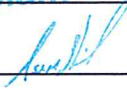
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	✓	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be-checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
19	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		@ Islam Sherif	
SIGNATURE			M. Omar
DATE			



**PRE-COMMISSIONING CHECK LIST**  
**FIRE AND GAS CABLES**  
**LP-11 A**

**INSULATION TEST**  
**LOW VOLTAGE CABLES**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
1000V	1000V	200

**NOTES:**

- Manufacture's test voltage & minimum values for insulation resistance should be referenced.

## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-F&G-SC-001-Cable



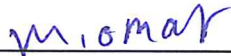
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	NIA	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		® Islam Sherif 	
DATE			



## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-F&G-SC-001-Cable

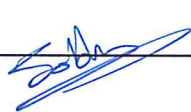

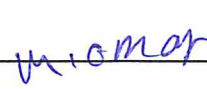
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	✓	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be-checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
19	Calibration test certificate of testing equipment to be checked.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		® Islam Sherif 	
DATE			



**PRE-COMMISSIONING CHECK LIST**  
**FIRE AND GAS CABLES**  
**LP-11 A**

**INSULATION TEST**  
**LOW VOLTAGE CABLES**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
1000V	1000V	200

**NOTES:**

- Manufacture's test voltage & minimum values for insulation resistance should be referenced.

## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-001-Cable

**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	✓	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	N/A	

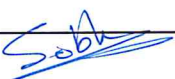


**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE	Sobhan		M. Omar
DATE			



## PRE-COMMISSIONING CHECK LIST FIRE AND GAS CABLES LP-11 A

<b>PROJECT TITLE</b> : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)			
<b>PROJECT NUMBER</b> : 1251-100		<b>DISCIPLINE</b> : Loss Prevention	
<b>SYSTEM NAME</b> : Field Fire Detection PLC system		<b>SYSTEM ID</b> : 030-LP-003	
<b>SUB-SYSTEM NAME</b> : Field Fire Detection PLC system		<b>SUB-SYSTEM ID</b> : 030-LP-003	
<b>ITEM TAG No.</b> : 030-JBF-001-Cable		<b>AREA</b> : 30	
<b>REF. DWGs/DOCs</b> :			
No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	✓	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be-checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	N/A	
19	Calibration test certificate of testing equipment to be checked.	✓	
<b>REMARKS AND OBSERVATIONS :</b>			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
<b>COMPANY</b>	<b>CONST. CONTRACTOR</b>	<b>ENPPI</b>	<b>CUSTOMER</b>
<b>NAME</b>			
<b>SIGNATURE</b>			
<b>DATE</b>			



**PRE-COMMISSIONING CHECK LIST**  
**FIRE AND GAS CABLES**  
**LP-11 A**

**INSULATION TEST**  
**LOW VOLTAGE CABLES**

<b>CABLE VOLTAGE LEVEL</b>	<b>D.C TEST VOLTAGE</b>	<b>MINIMUM INSULATION RESISTANCE (M.OHMS).</b>
1000V	1000V	200

**NOTES:**

- Manufacture's test voltage & minimum values for insulation resistance should be referenced.



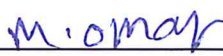
## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

<b>PROJECT TITLE</b> : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)	
<b>PROJECT NUMBER</b> : 1251-100	<b>DISCIPLINE</b> : Loss Prevention
<b>SYSTEM NAME</b> : Field Fire Detection PLC system	<b>SYSTEM ID</b> : 030-LP-003
<b>SUB-SYSTEM NAME</b> : Field Fire Detection PLC system	<b>SUB-SYSTEM ID</b> : 030-LP-003
<b>ITEM TAG No.</b> : 030-JBF-002	<b>AREA</b> : 30
<b>REF. DWGs/DOCs</b> :	

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check equipment fixings & mountings are secure.	✓	
3	Properly support and accessible.	✓	
4	Check equipment nameplate details.	✓	
5	Check junction box against area classification.	✓	
6	Inspect junction box for mechanical damage.	✓	
7	Type and size of cable glands to be checked.	✓	
8	Check all connections are tight, correct & have cable markings fitted.	✓	
9	Check local junction box inside & outside cleaning.	✓	
10	Check local junction box for sealing & tightening.	✓	
11	Check local junction box earthing cables termination & connection.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-002



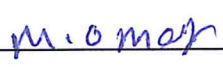
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Unused cable entries to be plugged correctly.	✓	
13	Wire identifications and cable markers to be checked w.r.t cable list.	✓	
14	Unused cable entries to be plugged correctly.	✓	
15	Check cable glands (sizes, tightened,...etc.) and gland plates.	✓	
16	Cable terminations to be checked w.r.t approved documents.	✓	
17	Contractor marked up drawings is available.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-001


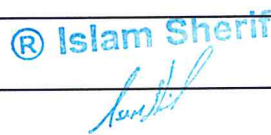
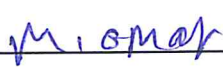
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check equipment fixings & mountings are secure.	✓	
3	Properly support and accessible.	✓	
4	Check equipment nameplate details.	✓	
5	Check junction box against area classification.	✓	
6	Inspect junction box for mechanical damage.	✓	
7	Type and size of cable glands to be checked.	✓	
8	Check all connections are tight, correct & have cable markings fitted.	✓	
9	Check local junction box inside & outside cleaning.	✓	
10	Check local junction box for sealing & tightening.	✓	
11	Check local junction box earthing cables termination & connection.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

<b>PROJECT TITLE</b> : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)	
<b>PROJECT NUMBER</b> : 1251-100	<b>DISCIPLINE</b> : Loss Prevention
<b>SYSTEM NAME</b> : Field Fire Detection PLC system	<b>SYSTEM ID</b> : 030-LP-003
<b>SUB-SYSTEM NAME</b> : Field Fire Detection PLC system	<b>SUB-SYSTEM ID</b> : 030-LP-003
<b>ITEM TAG No.</b> : 030-JBF-001	<b>AREA</b> : 30
<b>REF. DWGs/DOCs</b> :	

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Unused cable entries to be plugged correctly.	✓	
13	Wire identifications and cable markers to be checked w.r.t cable list.	✓	
14	Unused cable entries to be plugged correctly.	✓	
15	Check cable glands (sizes, tightened,....etc.) and gland plates.	✓	
16	Cable terminations to be checked w.r.t approved documents.	✓	
17	Contractor marked up drawings is available.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		Islam Sherif	
SIGNATURE			M. Omar
DATE			



## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

<b>PROJECT TITLE</b> : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)	
<b>PROJECT NUMBER</b> : 1251-100	<b>DISCIPLINE</b> : Loss Prevention
<b>SYSTEM NAME</b> : Field Fire Detection PLC system	<b>SYSTEM ID</b> : 030-LP-003
<b>SUB-SYSTEM NAME</b> : Field Fire Detection PLC system	<b>SUB-SYSTEM ID</b> : 030-LP-003
<b>ITEM TAG No.</b> : 030-JBF-009	<b>AREA</b> : 30
<b>REF. DWGs/DOCs</b> :	

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check equipment fixings & mountings are secure.	✓	
3	Properly support and accessible.	✓	
4	Check equipment nameplate details.	✓	
5	Check junction box against area classification.	✓	
6	Inspect junction box for mechanical damage.	✓	
7	Type and size of cable glands to be checked.	✓	
8	Check all connections are tight, correct & have cable markings fitted.	✓	
9	Check local junction box inside & outside cleaning.	✓	
10	Check local junction box for sealing & tightening.	✓	
11	Check local junction box earthing cables termination & connection.	✓	

### REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			M. Omar
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-009



**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Unused cable entries to be plugged correctly.	✓	
13	Wire identifications and cable markers to be checked w.r.t cable list.	✓	
14	Unused cable entries to be plugged correctly.	✓	
15	Check cable glands (sizes, tightened,.....etc.) and gland plates.	✓	
16	Cable terminations to be checked w.r.t approved documents.	✓	
17	Contractor marked up drawings is available.	N/A	

### REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			M. Omar
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-008

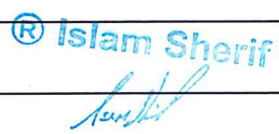
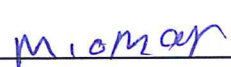
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check equipment fixings & mountings are secure.	✓	
3	Properly support and accessible.	✓	
4	Check equipment nameplate details.	✓	
5	Check junction box against area classification.	✓	
6	Inspect junction box for mechanical damage.	✓	
7	Type and size of cable glands to be checked.	✓	
8	Check all connections are tight, correct & have cable markings fitted.	✓	
9	Check local junction box inside & outside cleaning.	✓	
10	Check local junction box for sealing & tightening.	✓	
11	Check local junction box earthing cables termination & connection.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-008



**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Unused cable entries to be plugged correctly.	✓	
13	Wire identifications and cable markers to be checked w.r.t cable list.	✓	
14	Unused cable entries to be plugged correctly.	✓	
15	Check cable glands (sizes, tightened,....etc.) and gland plates.	✓	
16	Cable terminations to be checked w.r.t approved documents.	✓	
17	Contractor marked up drawings is available.	NA	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME		® Islam Sherif	
SIGNATURE			Miomar
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-007


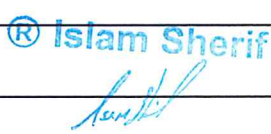
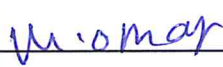
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
1	Construction punch list to be checked.	✓	
2	Check equipment fixings & mountings are secure.	✓	
3	Properly support and accessible.	✓	
4	Check equipment nameplate details.	✓	
5	Check junction box against area classification.	✓	
6	Inspect junction box for mechanical damage.	✓	
7	Type and size of cable glands to be checked.	✓	
8	Check all connections are tight, correct & have cable markings fitted.	✓	
9	Check local junction box inside & outside cleaning.	✓	
10	Check local junction box for sealing & tightening.	✓	
11	Check local junction box earthing cables termination & connection.	✓	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		 <b>® Islam Sherif</b>	
DATE			

## PRE-COMMISSIONING CHECK LIST SEPARATE JUNCTION BOX LP-12 A

**PROJECT TITLE** : EGPC Crude Oil Tank Farms Project, Agrood Area 30 (Module-01)

**PROJECT NUMBER** : 1251-100

**DISCIPLINE** : Loss Prevention

**SYSTEM NAME** : Field Fire Detection PLC system

**SYSTEM ID** : 030-LP-003

**SUB-SYSTEM NAME** : Field Fire Detection PLC system

**SUB-SYSTEM ID** : 030-LP-003

**ITEM TAG No.** : 030-JBF-007



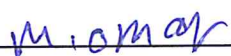
**AREA** : 30

**REF. DWGs/DOCs** :

No.	DESCRIPTION	RESULT	PL
		OK/NA/PL	ITEM No.
12	Unused cable entries to be plugged correctly.	✓	
13	Wire identifications and cable markers to be checked w.r.t cable list.	✓	
14	Unused cable entries to be plugged correctly.	✓	
15	Check cable glands (sizes, tightened,....etc.) and gland plates.	✓	
16	Cable terminations to be checked w.r.t approved documents.	✓	
17	Contractor marked up drawings is available.	N/A	

**REMARKS AND OBSERVATIONS :**

**OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.**

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE		 <b>® Islam Sherif</b>	
DATE			





Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 12.11- Electrical Supplier Check Lists & Reports



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

### 13- Electrical Commissioning



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

### 13.01- Electrical -Commissioning Check Lists





Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 13.02- Electrical Supplier Check Lists & Reports



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 14- Red Marked-up Drawings



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 14.01- P&ID





Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 14.02- Instrumentation Drawings



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



System ID	030-LP-003
System Description	Field Fire detection PLC system

## 14.03- Electrical Drawings